

PUBLIC NOTICE

BFI Waste Systems of Tennessee, LLC, has applied to the Tennessee Air Pollution Control Division (TAPCD) for renewal of a major source operating permit subject to the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations (also frequently referred to as Title V regulations). A major source (Title V) operating permit is required by both the Federal Clean Air Act and the Tennessee Air Pollution Control Regulations.

The applicant is **BFI Waste Systems of Tennessee, LLC, DBA Carter Valley Landfill**, with a site address of 2825 Carter's Valley Road, Church Hill, Tennessee. They seek to obtain renewal of a major source operating permit for their municipal solid waste landfill.

EPA has agreed to treat this draft Part 70 permit as a proposed Part 70 permit and to perform its 45-day review provided by the law concurrently with the public notice period. If any substantive comments are received, EPA's 45-day review period will cease to be performed concurrently with the public notice period. EPA's 45-day review period will start once the public notice period has been completed and EPA receives notification from the Tennessee Air Pollution Control Division the comments have been received and resolved. Whether EPA's 45-day review period is performed concurrently with the public notice comment period or after the public comment period has ended, the deadline for citizen's petition to object to the EPA Administrator will be determined as if EPA's 45-day review is performed after the public comment period has ended (i.e., sequentially).

The status regarding EPA's 45-day review of this project and the deadline for submitting a citizens petition can be found at the following website address: <http://www2.epa.gov/caa-permitting/caa-permitting-epas-southeastern-region>

A copy of the application materials used by the TAPCD and a copy of the draft permit are available for public inspection during normal business hours at the following locations:

Church Hill Public Library
412 East Main Blvd
Rogersville, TN 37642

and Tennessee Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

Also, if you require a copy of the draft/proposed permit it is available electronically by accessing the Air Pollution Control Public Participation Opportunity (APC PPO) page: <http://www.tn.gov/environment/topic/ppo-air>

Interested parties are invited to review these materials and comment. In addition, a public hearing may be requested at which written or oral presentations may be made. To be considered, written comments or requests for a public hearing must be made within thirty (30) days of the date of this notice and should be addressed to **Michelle Walker Owenby, Director, Division of Air Pollution Control, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 15th Floor, Nashville, Tennessee 37243**. Questions concerning the source(s) may be addressed to Mr. Doug Wright at the same address or by calling (615)-532-0583 or emailing to Doug.s.wright@tn.gov. A final determination will be made after weighing all relevant comments.

Individuals with disabilities who wish to participate should contact the Tennessee Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such participation. Such contact may be in person, by writing, telephone, or other means, and should be made no less than ten days prior to the end of the public comment period to allow time to provide such aid or services. Contact the Tennessee Department of Environment and Conservation ADA Coordinator, W.R. Snodgrass Tenn. Tower, 312 Rosa L. Parks Ave. 2nd Floor, Nashville, TN 37243, 1-866-253-5827. Hearing impaired callers may use the Tennessee Relay Service, 1-(800)-848-0298.

(Do not publish text below the dotted line)

For the Hawkins County "Rogersville Review"-- publish once July 13, 2016

DATE: JULY 10, 2016

Assigned to --Doug Wright, Air Pollution Control

No alterations to the above are allowed:

BFI Waste Systems of Tennessee, LLC must pay to place this advertisement in the newspaper.

Air Pollution Control must be furnished with an affidavit from the newspaper stating that the ad was run and the date of the ad or one complete sheet from the newspaper showing this advertisement, the name of the newspaper and the date of publication. Mail to Doug Wright, Air Pollution Control Division, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 15th Floor, Nashville, Tennessee 37243 or send a pdf copy of this information electronically to air.pollution.control@tn.gov .

TITLE V PERMIT STATEMENT

Company	BFI Waste Systems of North America, Inc.
Facility Name:	Carter Valley Landfill - Title V Renewal
City:	Church Hill
County:	Hawkins

Date Application Received:	February 19, 2015
Date Application Deemed Complete:	February 19, 2015

Emission Source Reference No.:	37-0080
Permit No.:	569924

INTRODUCTION

This narrative is being provided to assist the reader in understanding the content of the attached Title V operating permit. This Title V Permit Statement is written pursuant to Tennessee Air Pollution Control Rule 1200-03-09-.02(11)(f)1.(v). The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to BFI Waste Systems of Tennessee, LLC DBA Carter Valley Landfill and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. It initially describes the facility receiving the permit, then the applicable requirements and their

significance, and finally the compliance status with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

Acronyms

PSD	Prevention of Significant Deterioration
NESHA	National Emission Standards for P Hazardous Air Pollutants
NSPS	New Source Performance Standards
MACT	Maximum Achievable Control Technol
NSR	New Source Review

I. Identification Information

A. Source Description

BFI Waste Systems of Tennessee, LLC. - DBA Carter Valley landfill is a municipal solid waste landfill located in Church Hill. The facility operates a landfill gas collection and control system with an open flare to combust the collected landfill gas.

B. Facility Classification

1. Attainment or Non-Attainment Area Location: Area is designated as an attainment area for all criteria pollutants.
2. Company is located in a Class II area.

C. Regulatory Status

1. PSD/NSR: This facility is not a major source under PSD.
2. Title V Major Source Status by Pollutant

Pollutant	Is the pollutant emitted?	If emitted, what is the facility's status?	
		Major Source Status	Non-Major Source Status
PM	Y	N	Y
PM ₁₀	Y	N	Y
SO ₂	Y	N	Y
VOC	Y	N	Y
NO _x	Y	N	Y
CO	Y	N	Y
Individual HAP	Y	N	Y
Total HAPs	Y	N	Y
Greenhouse Gas	Y	Y	N

3. NESHAP Standards: This facility is subject to 40 CFR 63 Subpart AAAA (National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills).
4. NESHAP Standards: This facility is subject to 40 CFR 61 Subpart M (National Emission Standards for Asbestos)
5. Program Applicability: Are the following programs applicable to the facility?

PSD: No
 NESHAP (40 CFR 61): Yes
 NESHAP (40 CFR 63): Yes
 NSPS: Yes

II. Compliance Information

A. Compliance Status

Is the facility currently in compliance with all applicable requirements? Yes

Are there any applicable requirements that will become effective during the permit term? No

III. Other Requirements

A. Emissions Trading: The facility is not involved in an emission trading program.

B. Acid Rain Requirements: This facility is not subject to any requirements in Title IV of the Clean Air Act.

C. Prevention of Accidental Releases: Not Applicable

IV. Public Participation Procedures

Notification of this draft permit was mailed to the following environmental agencies:

1. EPA
2. Kentucky Department for Environmental Protection
3. North Carolina Division of Environmental Management
4. Virginia Department of Environmental Quality

RESPONSE TO COMMENTS

General Information

Facility Name:	BFI Waste Systems of North America, Inc. - Carter Valley Landfill
Emission Source Reference No.:	37-0080
Permit No.:	562997
Date Application Received:	August 10, 2009
Date Application Deemed Complete:	August 10, 2009
Public Notice Date:	June 25, 2010
Public Hearing Date:	N/A

For Public Hearing (If Applicable)

Hearing Officer:	
Division of Air Pollution Control Representatives:	
Other Divisions:	
Public:	

Comment Summary

There were no comments received during the public comment period.

Statement of Basis for 37-0080 Title V Operating Permit 562997
Attachment A: Modifications to Title V Permit since First Issuance

The purpose of this addendum is to address the changes made to this facility since issuance of Title V Operating Permit 548534. Specific changes are addressed in the following tables:

37-0080: Changes to Title V Operating Permit 548534 since First Issuance (Issued May 26, 1999)

Permit Modification	Issue Date	Condition or Section	Modification
There were no changes to Title V Operating Permit 548534 during the permit term.			

37-0080: Changes Made in Title V Renewal Permit 556491 (Issued February 4, 2005)

Condition or Section	Change (Title V Renewal Permit)
E2	Condition E2 was updated to reflect Tennessee's standard language for Title V reporting.
E9(b) (iv)	In response to comments from field office/enforcement personnel, Condition E9(b) (iv) was updated to clarify one-month remonitoring requirements.
E14	MACT requirements were added to the Title V renewal.

37-0080: Changes to Title V Operating Permit 556491 since Renewal Issuance

Permit Modification	Issue Date	Condition or Section	Modification
Administrative Amendment #1	August 24, 2005	Cover Page	Responsible Official change.
Minor Modification #1 (MPM-1)	January 9, 2009	B5	<p>Condition B5(d) was revised to add the underlined language:</p> <p>(d) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether <u>compliance during the period was continuous or intermittent</u>. The certification shall be based on the method or means designated in B5(b) above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and</p>
		C2	<p>Condition C2(b) was revised to add the underlined language:</p> <p>(b) The written notification must be signed by a facility Title V responsible official and include the following:</p> <ol style="list-style-type: none"> 1. brief description of the change within the permitted facility; 2. specifies the date on which the change will occur; 3. declares <u>and quantifies where possible</u> any change in emissions; 4. declares any permit term or condition that is no longer applicable as a result of the change; and 5. <u>declares the requested change is not a Title I modification and will not exceed</u> allowable emissions under the permit.
		Section E Source Description	The source description was updated to indicate that landfill gas may be routed to either an open flare or a landfill gas treatment system.
		E2	<p>Condition E2(b) (4) was revised to add the underlined language:</p> <p>(4) The status of compliance with the terms and conditions of the permit for the period covered by the certification, <u>including whether compliance during the period was continuous or intermittent</u>. The certification shall be based on the method or means designated in E2-1(b) (2) above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an *excursion or **exceedance as defined below occurred; and</p>
		E3	Updated description of control equipment to state that landfill gas was controlled by either an open utility flare or routed to a landfill gas treatment system. Updated paragraph (b) to only require a flame on the open flare whenever landfill gas is not routed to the treatment system.
		E4	Updated paragraph (b) to allow bypass of the flare when landfill gas is routed to the gas treatment system.
		E8	Updated the language of this condition to require the permittee to route all collected landfill gas either to the open flare or to the gas treatment system.

37-0080: Changes Made in Title V Renewal Permit 562997 (Issued August 30, 2010)

Condition or Section	Change (Title V Renewal Permit)																																												
Section E	<p>All conditions in Section E were renumbered to match TDEC standard format, as indicated below:</p> <table> <tr> <th>Condition Number (Old Permit 556491)</th><th>Condition Number (New Permit 562997)</th></tr> <tr><td>E1</td><td>E1</td></tr> <tr><td>E2</td><td>E2-1</td></tr> <tr><td>E3</td><td>E3-1</td></tr> <tr><td>E4</td><td>E3-2</td></tr> <tr><td>E5</td><td>E3-3</td></tr> <tr><td>E6</td><td>E3-4</td></tr> <tr><td>E7</td><td>E3-5</td></tr> <tr><td>E8</td><td>E3-6</td></tr> <tr><td>E9</td><td>E3-7</td></tr> <tr><td>E10</td><td>E3-8</td></tr> <tr><td>E11</td><td>E3-9</td></tr> <tr><td>E12</td><td>E3-10</td></tr> <tr><td>E13</td><td>E3-11</td></tr> <tr><td>E14</td><td>E3-12</td></tr> <tr><td>E15</td><td>Condition deleted (combined Title V and NSPS reporting into a single condition)</td></tr> <tr><td>E16</td><td>E3-13</td></tr> <tr><td>E17</td><td>E3-14</td></tr> <tr><td>E18</td><td>E3-15</td></tr> <tr><td>E19</td><td>E3-16</td></tr> <tr><td>E20</td><td>E3-17</td></tr> <tr><td>N/A</td><td>E3-18 (new condition)</td></tr> </table>	Condition Number (Old Permit 556491)	Condition Number (New Permit 562997)	E1	E1	E2	E2-1	E3	E3-1	E4	E3-2	E5	E3-3	E6	E3-4	E7	E3-5	E8	E3-6	E9	E3-7	E10	E3-8	E11	E3-9	E12	E3-10	E13	E3-11	E14	E3-12	E15	Condition deleted (combined Title V and NSPS reporting into a single condition)	E16	E3-13	E17	E3-14	E18	E3-15	E19	E3-16	E20	E3-17	N/A	E3-18 (new condition)
Condition Number (Old Permit 556491)	Condition Number (New Permit 562997)																																												
E1	E1																																												
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E4	E3-2																																												
E5	E3-3																																												
E6	E3-4																																												
E7	E3-5																																												
E8	E3-6																																												
E9	E3-7																																												
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E19	E3-16																																												
E20	E3-17																																												
N/A	E3-18 (new condition)																																												
E2-1(a)	Revised semiannual reporting requirements to reference NSPS/MACT reporting requirements (the information required for the semiannual report will not change).																																												
E2-1(b)	<p>Revised E-21(b)4 to add the underlined language:</p> <p>"The status of compliance with the terms and conditions of the permit for the period covered by the certification, <u>including whether compliance during the period was continuous or intermittent.</u> The certification shall be based on the method or means designated in E2-1(b)2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an *excursion or **exceedance as defined below occurred; and"</p>																																												
E2-2	Added general requirements for recordkeeping.																																												
E2-3, Attachment 1	Added general requirements for visible emissions.																																												

Title V Permit Statement

37-0080, Title V Operating Permit 569924

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37-0080: Changes Made in Title V Renewal Permit 562997 (Issued August 30, 2010)

Condition or Section	Change (Title V Renewal Permit)
E3-2, E3-11, E3-13	Revised to indicate that the open flares used to control landfill gas emissions do not utilize a bypass line, and the NSPS requirement to record the bypass of the flare does not apply to this facility.
E3-3, E3-8, E3-10, E3-11, E3-13	Added language referencing the design plan and NSPS alternatives for the landfill gas treatment system.
E3-12	Deleted language stating that compliance with the permit condition does not relieve the permittee of the responsibility to comply with all applicable provisions of 40 CFR 63 Subpart AAAA.
E3-18, Attachment 2	<p>Added the following condition to reference the NSPS design plan and requested compliance alternatives:</p> <p>E3-18. The permittee shall operate the gas collection system at this facility in accordance with the design plan submitted for this facility in accordance §60.752(b)(2). Revisions to the approved design plan shall be prepared by a professional engineer, in accordance with §60.752(b)(1)(ii).</p> <p>(a) The collection and control system as described in the plan shall meet the design requirements of §60.752(b)(2)(ii).</p> <p>(b) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of §§60.753 through 60.758 proposed by the owner or operator. Approved alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of §§60.753 through 60.758 are listed in Attachment 2 of this permit.</p> <p>(c) The collection and control system design plan shall either conform with specifications for active collection systems in §60.759 or include a demonstration of the sufficiency of the alternative provisions to §60.759.</p> <p>§60.752(b)(2)''</p>

37-0080: Changes to Title V Operating Permit 562997 since Renewal Issuance

Permit Modification	Issue Date	Condition or Section	Modification
Significant Modification #1 (SPM-1)	July 17, 2013	Cover page	Updated technical contact.
		E2-1	Updated semiannual reporting requirements.
		E3-4, E3-18, Attachment 2	Updated pressure and temperature monitoring requirements to incorporate the revised provisions for nonproducing wells (Attachment 2). Specific changes to Attachment 2 are shown on following pages.
		Public comments (SPM-1): The public notice for this modification was published in the Rogersville Review on May 29, 2013. There were <u>no comments</u> received during the public comment period.	

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Significant Modification #1
Approved NSPS Alternatives for BFI Carter Valley Landfill
Gas Collection and Control System (GCCS) Design Plan dated May 24, 2012, and Revisions dated April 10, 2013

1. Nonproductive Wells: The following procedure is approved for nonproductive wells.

- (a) A landfill gas extraction well that exhibits oxygen concentrations exceeding 5% by volume shall be identified as a nonproducing well if oxygen concentrations do not decline to acceptable levels after more than one hour of reduced vacuum.
- (b) The permittee shall continue to monitor nonproducing wells in accordance with **Condition E3-4** of this permit, but nonproducing wells shall be exempt from NSPS operating requirements of **Condition E3-3** (positive pressure, temperature exceedances, and oxygen concentration exceedances will not be considered deviations).
- (c) The valve on non-producing wells will be closed during normal GCCS operations until the gas quality at the well recovers.
- (d) If monthly monitoring indicates that pressure has built up in the well and the oxygen concentration still exceeds five percent, the well will be opened to relieve the pressure and will be shut down until it is monitored the following month.
- (e) Should static landfill gas concentrations at the well increase to levels considered typical for anaerobic conditions (i.e., oxygen concentration below 5% by volume), the wellhead control valve will be opened, and the well will be operated in accordance with the requirements of **Condition E3-3** of this permit. If the well(s) return to nonproducing characteristics, the wells will be shut off and deemed exempt from NSPS operating requirements.
- (f) If methane surface emissions near the well exceed 500 parts per million above background, the permittee shall evaluate the area and implement corrective measures as required by §60.755(b)(4) and **Condition E3-7(b)** of this permit, including the reactivation of nonproducing wells as needed.
- (g) A record of all nonproducing wells shall be maintained at the facility and made available for inspection by the Technical Secretary or his representative upon request. These records must be retained for a period of not less than five (5) years.

2. Temperature Exceedances for Gas Collection Wells

The following alternative procedure is approved to address temperature exceedances for gas collection wells:

- (a) Wells exhibiting operating temperatures above 131° F, but below 160° F with no signs of smoke, will be operated, monitored, and reported at their operating temperature with no further NSPS action required. However, if it is suspected that a subsurface oxidation is occurring at the well(s), the situation will be further investigated (e. g., wells will be tested for elevated carbon monoxide, monitored for visible evidence of combustion, etc.). If it is confirmed that subsurface oxidation is present, the well(s) will be shut off as provided for under §60.753(b)(1), and corrective measures shall be implemented. The permittee shall report any wells shut down due to potential subsurface oxidation in the semiannual report required by **Condition E2-1(a)** of this permit.
- (b) Wells exhibiting operating temperatures above 160°F shall be field-tested for hydrogen gas.
 - (i) If the test indicates hydrogen concentrations above 1% by volume, the well shall be identified as an aluminum waste reaction (AWR) well. The AWR well shall be operated, monitored, and reported at its operating temperature with no further NSPS action.
 - (ii) If the test indicates hydrogen concentrations below 1% by volume, the permittee shall collect a gas sample for laboratory analysis within 30 days of the initial

monitoring event. Any well with a temperature greater than 160° F will be shut down and treated as a potential subsurface oxidation.

- (iii) The permittee shall report any wells operating as AWR wells or shut down due to potential subsurface oxidation in the semiannual report required by **Condition E2-1(a)** of this permit.
- (iv) AWR wells shall be monitored monthly for carbon monoxide using a portable field analyzer and quarterly by laboratory analysis.
- (v) AWR wells shall be monitored monthly for visible evidence of smoke and/or char.
- (c) The permittee shall report all monitoring results in the semiannual report required by **Conditions E2-1** of this permit. A summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance. All data shall be presented in a clear, legible format that allows the Technical Secretary to evaluate compliance.
- (d) Records of all monitoring shall be maintained at the facility and made available for inspection by the Technical Secretary or his representative upon request. These records must be retained for a period of not less than five (5) years.

3. 120-Day Timeline for Correction of Exceedances (§§60.755(a) (3) and (5))

40 CFR §§60.755(a) (3) and (a) (5) require the landfill owner or operator to remedy gas collection and control system (GCCS) operating and compliance monitoring exceedances within 5 calendar days. If the condition cannot be corrected within 15 days of the initial exceedance, the GCCS must be expanded within 120 days of the initial reported exceedance, or an alternate remedy to correct the exceedance(s) and a corresponding timeline for implementation may be submitted for agency approval. The following corrective actions may be implemented (in lieu of expansion of the GCCS) during the 120-day assessment period:

- (a) The permittee may repair or replace existing damaged components (replacement of wellheads, faulty pumps, etc.) or install new components (e.g. installation of pumps in extraction wells, sumps, etc.).
- (b) The permittee may assess whether the well has become nonproductive. If the well(s) are non-producing, the permittee may follow the actions described under item 1 of this attachment.
- (c) If exceedances cannot be corrected as specified in (a) and (b) above, the permittee shall expand the GCCS within 120 days of the initial reported exceedance, or request an alternative timeline for mitigating the exceedance.
- (d) Records of all corrective actions shall be maintained at the facility and made available for inspection by the Technical Secretary or his representative upon request. These records must be retained for a period of not less than five (5) years.

4. Oxygen Concentration Limit for Odor Control System: An oxygen concentration limit of 20.9% is approved for leachate sumps, cleanout risers, and horizontal trenches that are connected to the gas collection system and used exclusively for odor control. Exceedances of the 20.9% oxygen concentration limit may be addressed using the decommissioning procedures identified in item 2 of this Attachment.

5. Migration Control Wells: Extraction wells installed outside of waste are exempt from the requirements of Subpart WWW.

6. Early Installation of Gas Extraction Wells: Extraction wells installed prior to the onset of NSPS Requirements (5 years for active areas or 2 years for areas that are closed or at final waste grade) will not be required to comply with the operational, record-keeping, or monitoring requirements of the NSPS until the wells are required for those areas.

7. Use of Portable Monitoring Devices: Monitoring of the parameters in §60.753 through §60.758 may be performed with a portable monitoring instrument such as a GEM 2000/500, LMS, or equivalent. The monitoring equipment will be verified to provide accurate measurement of methane, carbon dioxide, oxygen, temperature, and pressure.

8. **Positive Pressure under a Geomembrane/Synthetic Cover:** A positive pressure of 5" WC is allowed for extraction wells located in areas in which a geomembrane or synthetic cover is in use that has been installed in accordance with U. S. EPA requirements for these materials.
9. **Collection Device Abandonment:** Due to changing conditions such as damage to a well during operations or long term non-productive areas, extraction wells may need to be re-drilled, abandoned, and/or decommissioned. The permittee may proceed with such changes without prior approval from the Administrator, provided that the permittee provides written notification to the Administrator in the first Title V semiannual report following the change. The notification shall include: 1) a statement that the landfill will have sufficient well density to comply with the NSPS requirements; and 2) a certified updated GCCS Layout drawing by a professional engineer.
10. **Flow Meters When No Bypass Is Present:** §§60.756(b)(i) and (ii) require the owner/operator of an affected source to install a flow meter to record flow to or bypass of the control device. However, the Municipal Solid Waste Landfill NSPS/EG Questions And Answers document from EPA indicates that LFG flow measurement or lock and key requirements would not apply to a GCCS that is designed with no physical means to bypass the control device. The existing GCCS design at this facility satisfies the flow measurement/lock-and-key waiver criteria, and the permittee is not required to install and operate a flow measuring device in accordance with the NSPS requirements. If the permittee decides to install a flow measuring device, the permittee is not required to monitor or record flow in accordance with NSPS. In the event that a malfunction occurs with the GCCS equipment, an electric or pneumatically operated valve has been designed to close to prevent the direct venting of raw LFG into the atmosphere.

37-0080: Changes Made in Title V Renewal Permit 569924 (Issue 2016)

Condition or Section	Changes (Title V Renewal Permit)
Cover page	Responsible official and contact person moved to Section E Information relied upon is the permit application dated 2-9-15 Revision date is 2-13 instead of 9-92 "-1531" was removed "Carter Valley Landfill" was changed to "DBA Carter Valley Landfill" "NESHAP Part 63 Subpart AAAA, NESHAP Part 61 Subpart M, and NSPS Part 60 Subpart WWW" was added
Page i	B10 is reserved
Page iii: Contents Section E	MACT and NSPS semi-annual reporting moved to E2-1(c) from E3-13
Page iii	A list of attachments has been added, including Attachments 3-5.
Pages 1-26	Page numbers were added in addition to i, ii, and iii.
A12, B5, and B6	Wording has been updated
B10	Reserved
Section E, Facility Description	Wording updated to include 40 CFR 61 Subpart M Asbestos
Annual Accounting Period	Dates are updated to 2016 and 2017
End Notes	Section (6), permit submittal address, and billing address have been added.
E2-1	E3-13 has been changed to E2-1(c)
E2-1(b)	Wording and address updated
E2-1(c)	This condition has been moved to this location from E3-13
E2-4	This condition has been added. This information was previously on the cover page
E2-5 through E2-7	These conditions were added
Section E3	"40 CFR" was added in front of "\$60" as necessary
E3-13	This condition was moved to E2-1(c), and the following conditions (E14 through E18) were re-numbered.
Attachment 1	The date was changed from 9-12-05 to 9-11-13 and the Decision Tree was replaced

37-0080: Changes Made in Title V Renewal Permit 569924 (Issue 2016)

Condition or Section	Changes (Title V Renewal Permit)
Attachments 3-4	Added to the permit

STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243



OPERATING PERMIT (TITLE V) Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70. (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations. The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

Issue Date: **Draft** Permit Number: **569924**

Expiration Date: **Five years [minus 1 day] from Issue Date**

Issued To:	Installation
Address:	
BFI Waste Systems of Tennessee, LLC	
DBA Carter Valley Landfill	2825 Carters Valley Road Church Hill

Installation Description:	
Municipal Solid Waste Landfill	NSPS Part 60 Subpart WWW
with Landfill Gas Collection and Control System	NESHAP Part 61 Subpart M
	NESHAP Part 63 Subpart AAAA

Emission Source Reference No.: **37-0080**

Renewal Application Due Date: **Six to Nine months before expiration date** Primary
SIC: 4953

Information Relied Upon:
Permit renewal application dated February 9, 2015
Email dated June 17, 2016

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST AT INSTALLATION ADDRESS

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- ATTACHMENT 1 Opacity Matrix Decision Tree for Visible Emission Evaluation Method 9 Dated September 11, 2013
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- ATTACHMENT 4 Tennessee Air Pollution Control Regulations, Applicable Parts from Rule 1200-03-11-.02, Hazardous Air Contaminants-Asbestos

SECTION A

GENERAL PERMIT CONDITIONS

A permit issued under the provisions of paragraph 1200-03-09-.02(11) is a permit issued pursuant to the requirements of Title V of the Federal Act and its implementing Federal regulations promulgated at 40 CFR, Part 70.

- A1. Definitions.** Terms not otherwise defined in the permit shall have the meaning assigned to such terms in the referenced regulation.

TAPCR 1200-03

- A2. Compliance requirement.** All terms and conditions in a permit issued pursuant to paragraph 1200-03-09-.02(11) including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act.

The permittee shall comply with all conditions of its permit. Except for requirements specifically designated herein as not being federally enforceable (State Only), non-compliance with the permit requirements is a violation of the Federal Act and the Tennessee Air Quality Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Non-compliance with permit conditions specifically designated herein as not being federally enforceable (State Only) is a violation of the Tennessee Air Quality Act and may be grounds for these actions.

TAPCR 1200-03-09-.02(11) (e)2(i) and 1200-03-09-.02(11) (e)1(vi) (I)

- A3. Need to halt or reduce activity.** The need to halt or reduce activity is not a defense for noncompliance. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this item shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations.

TAPCR 1200-03-09-.02(11) (e)1(vi) (II)

- A4. The permit.** The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

TAPCR 1200-03-09-.02(11) (e)1(vi) (III)

- A5. Property rights.** The permit does not convey any property rights of any sort, or any exclusive privilege.

TAPCR 1200-03-09-.02(11) (e)1(vi) (IV)

- A6. Submittal of requested information.** The permittee shall furnish to the Technical Secretary, within a reasonable time, any information that the Technical Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or termination of the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Technical Secretary copies of records required to be kept by the permit. If the permittee claims that such information is confidential, the Technical Secretary may review that claim and hold the information in protected status until such time that the Board can hear any

contested proceedings regarding confidentiality disputes. If the information is desired by EPA, the permittee may mail the information directly to EPA. Any claims of confidentiality for federal purposes will be determined by EPA.

TAPCR 1200-03-09-.02 (11) (e) 1 (vi) (V)

- A7. Severability clause.** The requirements of this permit are severable. A dispute regarding one or more requirements of this permit does not invalidate or otherwise excuse the permittee from their duty to comply with the remaining portion of the permit.

TAPCR 1200-03-09.02(11)(e)1(v)

A8. Fee payment.

(a) The permittee shall pay an annual major source emission fee based upon the responsible official's choice of actual emissions or allowable emissions. An emission cap of 4,000 tons per year per regulated pollutant per major source SIC Code shall apply to actual or allowable based emission fees. A major source annual emission fee will not be charged for emissions in excess of the cap (s) or for carbon monoxide.

(b) Major sources who have filed a timely, complete operating permit application in accordance with 1200-03-09-.02(11), shall pay allowable emission based fees until the beginning of the next annual accounting period following receipt of their major source operating permit. At that time, the permittee shall begin paying their annual emission fee based upon their choice of actual or allowable based fees, or mixed actual and allowable based fees as stated under SECTION E of this permit. Once permitted, altering the existing choice shall be accomplished by a written request of the major source, filed in the office of the Technical Secretary at least one hundred eighty days prior to the expiration or reissuance of the major source operating permit.

(c) Major sources must conform to the following requirements with respect to fee payments:

1. If a major source choosing an allowable based annual emission fee wishes to restructure its allowable emissions for the purposes of lowering its annual emission fees, a mutually agreed upon, more restrictive regulatory requirement may be established to minimize the allowable emissions and thus the annual emission fee. The more restrictive requirement must be specified on the permit, and must include the method used to determine compliance with the limitation. The documentation procedure to be followed by the major source must also be included to insure that the limit is not exceeded. Restructuring the allowable emissions is permissible only in the annual accounting periods of eligibility and only, if the written request for restructuring is filed with the Technical Secretary at least 120 days prior to the beginning of the annual accounting period of eligibility. These periods of eligibility occur upon expiration of the initial major source operating permit, renewal of an expired major source operating permit or reissuance of a major source operating permit.

2. Major sources paying on allowable based emission fees will be billed by the Division no later than April 1 prior to the end of the accounting period. The major source annual emission fee is due July 1 following the end of the accounting period.

3. Major sources choosing an actual based annual emission fee shall file an actual emissions analysis with the Technical Secretary which summarizes the actual emissions of all regulated pollutants at the air contaminant sources of their facility. Based upon the actual emissions analysis, the source shall calculate the fee due and submit the payment and the analysis each July 1st following the end of the annual accounting period.

4. Major sources choosing a mixture of allowable and actual based emission fees shall file an actual emissions and allowable emissions analysis with the Technical Secretary which summarizes the actual and allowable emissions of all regulated pollutants at the air contaminant sources of their facility. Based upon the analysis, the source shall calculate the fee due and submit the payment and the analysis each July 1st following the end of the annual accounting period.

The mixed based fee shall be calculated utilizing the 4,000 ton cap specified in subparagraph 1200-03-26-.02(2)(i). In determining the tonnages to be applied toward the regulated pollutant 4,000 ton cap in a mixed based fee, the source shall first calculate the actual emission based fees for a regulated pollutant and apply that tonnage toward the regulated pollutant's cap. The remaining tonnage available in the 4,000 ton category of a regulated pollutant shall be subject to allowable emission based fee calculations for the sources that were not included in the actual emission based fee calculations. Once the 4,000 ton cap has been reached for a regulated pollutant, no additional fee shall be required.

5. Major sources choosing to pay their major source annual emission fee based on actual based emissions or a mixture of allowable and actual based emissions may request an extension of time to file their emissions analysis with the Technical Secretary. The extension may be granted by the Technical Secretary up to ninety (90) days. The request for extension must be postmarked no later than July 1 or the request for extension shall be denied. The request for extension to file must state the reason and give an adequate explanation.

An estimated annual emission fee payment of no less than eighty percent (80%) of the fee due July 1 must accompany the request for extension to avoid penalties and interest on the underpayment of the annual emission fee. A remaining balance due must accompany the emission analysis. If there has been an overpayment, a refund may be requested in writing to the Division or be applied as a credit toward next year's major source annual emission fee. The request for extension of time is not available to major sources choosing to pay their major source annual emission fee based on allowable emissions.

6. Newly constructed major sources or minor existing sources modifying their operations such that they become a major source in the midst of the standard July 1st to June 30th annual accounting period, shall pay allowable based annual emission fees for the fractional remainder of the annual accounting period commencing upon their start-up. At the beginning of the next annual accounting period, the "responsible official" of the source may choose to pay annual emission fees based on actual or allowable emissions or a mixture of the two as provided for in this rule 1200-03-26-.02.

(d) Where more than one (1) allowable emission limit is applicable to a regulated pollutant, the allowable emissions for the regulated pollutants shall not be double counted. Major sources subject to the provisions of paragraph 1200-03-26-.02(9) shall apportion their emissions as follows to ensure that their fees are not double counted.

1. Sources that are subject to federally promulgated hazardous air pollutant standards that can be imposed under Chapter 1200-03-11 or Chapter 1200-03-31 will place such regulated emissions in the specific hazardous air pollutant under regulation. If the pollutant is also in the family of volatile organic compounds or the family of particulates, the pollutant shall not be placed in that respective family category.

2. A miscellaneous category of hazardous air pollutants shall be used for hazardous air pollutants listed at part 1200-03-26-.02(2)(i)12 that do not have an allowable emission standard. A pollutant placed in this category shall not be subject to being placed in any other category such as volatile organic compounds or particulates.

3. Each individual hazardous air pollutant and the miscellaneous category of hazardous air pollutants is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

4. Major sources that wish to pay annual emission fees for PM₁₀ on an allowable emission basis may do so if they have a specific PM₁₀ allowable emission standard. If a major source has a total particulate emission standard, but wishes to pay annual emission fees on an actual PM₁₀ emission basis, it may do so if the PM₁₀ actual emission levels are proven to the satisfaction of the Technical Secretary. The method to demonstrate the actual PM₁₀ emission levels must be made as part of the source's major source operating permit in advance in order to exercise this option. The PM₁₀ emissions reported under these options shall not be subject to fees under the family of particulate emissions. The 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i) shall also apply to PM₁₀ emissions.

TAPCR 1200-03-26-.02 (3) and (9) and 1200-03-09-.02(11)(e)1(vii)

A9. Permit revision not required. A permit revision will not be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or process for changes that are provided for in the permit.

TAPCR 1200-03-09-.02(11)(e)1(viii)

A10. Inspection and entry. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Technical Secretary or his

authorized representative to perform the following for the purposes of determining compliance with the permit applicable requirements:

- (a) Enter upon, at reasonable times, the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) As authorized by the Clean Air Act and Chapter 1200-03-10 of TAPCR, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
- (e) "Reasonable times" shall be considered to be customary business hours unless reasonable cause exists to suspect noncompliance with the Act, Division 1200-03 or any permit issued pursuant thereto and the Technical Secretary specifically authorizes an inspector to inspect a facility at any other time.

TAPCR 1200-03-09-.02(11)(e)3.(ii)

A11. Permit shield.

- (a) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date of permit issuance, provided that:
 - 1. Such applicable requirements are included and are specifically identified in the permit; or
 - 2. The Technical Secretary, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- (b) Nothing in this permit shall alter or affect the following:
 - 1. The provisions of section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section. Similarly, the provisions of T.C.A. §68-201-109 (emergency orders) including the authority of the Governor under the section;
 - 2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - 3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Federal Act; or
 - 4. The ability of EPA to obtain information from a source pursuant to section 114 of the Federal Act.
- (c) Permit shield is granted to the permittee.

A12. Permit renewal and expiration.

- (a) An application for permit renewal must be submitted at least 180 days, but no more than 270 days, prior to the expiration of this permit. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted.
- (b) Provided that the permittee submits a timely and complete application for permit renewal the source will not be considered in violation of paragraph 1200-03-09-.02(11) until the Technical Secretary takes final action on the permit application, except as otherwise noted in paragraph 1200-03-09-.02(11).
- (c) This permit, its shield provided in Condition A11, and its conditions will be extended and effective after its expiration date provided that the source has submitted a timely, complete renewal application to the Technical Secretary.

TAPCR 1200-03-09-.02(11)(f)3 and 2, 1200-03-09-.02(11)(d)1(i)(III), and 1200-03-09-.02(11)(a)2

A13. Reopening for cause.

(a) A permit shall be reopened and revised prior to the expiration of the permit under any of the circumstances listed below:

1. Additional applicable requirements under the Federal Act become applicable to the sources contained in this permit provided the permit has a remaining term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the permit expiration date of this permit, unless the original has been extended pursuant to 1200-03-09-.02(11)(a)2.

2. Additional requirements become applicable to an affected source under the acid rain program.

3. The Technical Secretary or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

4. The Technical Secretary or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(b) Proceedings to reopen and issue a permit shall follow the same proceedings as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists, and not the entire permit. Such reopening shall be made as expeditiously as practicable.

(c) Reopenings for cause shall not be initiated before a notice of such intent is provided to the permittee by the Technical Secretary at least 30 days in advance of the date that the permit is to be reopened except that the Technical Secretary may provide a shorter time period in the case of an emergency. An emergency shall be established by the criteria of T.C.A. 68-201-109 or other compelling reasons that public welfare is being adversely affected by the operation of a source that is in compliance with its permit requirements.

(d) If the Administrator finds that cause exists to terminate, modify, or revoke and reissue a permit as identified in A13, he is required under federal rules to notify the Technical Secretary and the permittee of such findings in writing. Upon receipt of such notification, the Technical Secretary shall investigate the matter in order to determine if he agrees or disagrees with the Administrator's findings. If he agrees with the Administrator's findings, the Technical Secretary shall conduct the reopening in the following manner:

1. The Technical Secretary shall, within 90 days after receipt of such notification, forward to EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate. If the Administrator grants additional time to secure permit applications or additional information from the permittee, the Technical Secretary shall have the additional time period added to the standard 90 day time period.
2. EPA will evaluate the Technical Secretary's proposed revisions and respond as to their evaluation.
3. If EPA agrees with the proposed revisions, the Technical Secretary shall proceed with the reopening in the same manner prescribed under Condition A13 (b) and Condition A13 (c).
4. If the Technical Secretary disagrees with either the findings or the Administrator that a permit should be reopened or an objection of the Administrator to a proposed revision to a permit submitted pursuant to Condition A13(d), he shall bring the matter to the Board at its next regularly scheduled meeting for instructions as to how he should proceed. The permittee shall be required to file a written brief expressing their position relative to the Administrator's objection and have a responsible official present at the meeting to answer questions for the Board. If the Board agrees that EPA is wrong in their demand for a permit revision, they shall instruct the Technical Secretary to conform to EPA's demand, but to issue the permit under protest preserving all rights available for litigation against EPA.

TAPCR 1200-03-09-.02(11) (f) 6 and 7.

- A14. Permit transference.** An administrative permit amendment allows for a change of ownership or operational control of a source where the Technical Secretary determines that no other change in the permit is necessary, provided that the following requirements are met:
- (a) Transfer of ownership permit application is filed consistent with the provisions of 1200-03-09-.03(6), and
 - (b) written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Technical Secretary.

TAPCR 1200-03-09-.02(11) (f) 4(i) (IV) and 1200-03-09-.03(6)

- A15. Air pollution alert.** When the Technical Secretary has declared that an air pollution alert, an air pollution warning, or an air pollution emergency exists, the permittee must follow the requirements for that episode level as outlined in TAPCR 1200-03-09-.03(1) and TAPCR 1200-03-15-.03.

- A16. Construction permit required.** Except as exempted in TAPCR 1200-03-09-.04, or excluded in subparagraph TAPCR 1200-03-02-.01(1)(aa) or subparagraph TAPCR 1200-03-02-.01(1)(cc), this facility shall not begin the construction of a new air contaminant source or the modification of an air contaminant source which may result in the discharge of air contaminants without first having applied for and received from the Technical Secretary a construction permit for the construction or modification of such air contaminant source. The construction and operation of landfill gas flares and landfill waste disposal cells in the current permitted volume design capacity of the landfill are exempt from the permitting requirements of this condition, except as the landfill operation may be regulated by the applicable requirements of 40 CFR 60 Subpart WWW. A landfill horizontal or vertical expansion to increase the volume design capacity of the landfill shall require a permit modification.

TAPCR 1200-03-09-.01(1) (a)

A17. Notification of changes. The permittee shall notify the Technical Secretary 30 days prior to commencement of any of the following changes to an air contaminant source which would not be a modification requiring a construction permit.

(a) change in air pollution control equipment

(b) change in stack height or diameter

(c) change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

TAPCR 1200-03-09-.02(7)

A18. Schedule of compliance. The permittee will comply with any applicable requirement that becomes effective during the permit term on a timely basis. If the permittee is not in compliance the permittee must submit a schedule for coming into compliance which must include a schedule of remedial measure(s), including an enforceable set of deadlines for specific actions.

TAPCR 1200-03-09-.02(11) (d)3 and 40 CFR Part 70.5(c)

A19. Title VI.

(a) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.

2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.

3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to Section 82.161.

(b) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

(c) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR, Part 82, Subpart G, Significant New Alternatives Policy Program.

A20. 112 (r). The permittee shall comply with the requirement to submit to the Administrator or designated State Agency a risk management plan, including a registration that reflects all covered processes, by June 21, 1999, if the permittee's facility is required pursuant to 40 CFR, 68, to submit such a plan.

SECTION B

**GENERAL CONDITIONS for MONITORING,
REPORTING, and ENFORCEMENT**

B1. Recordkeeping. Monitoring and related record keeping shall be performed in accordance with the requirements specified in the permit conditions for each individual permit unit. In no case shall reports of any required monitoring and record keeping be submitted less frequently than every six months.

(a) Where applicable, records of required monitoring information include the following:

1. The date, place as defined in the permit, and time of sampling or measurements;
2. The date(s) analyses were performed;
3. The company or entity that performed the analysis;
4. The analytical techniques or methods used;
5. The results of such analyses; and
6. The operating conditions as existing at the time of sampling or measurement.

(b) Digital data accumulation which utilizes valid data compression techniques shall be acceptable for compliance determination as long as such compression does not violate an applicable requirement and its use has been approved in advance by the Technical Secretary.

TAPCR 1200-03-09-.02(11)(e)1(iii)

B2. Retention of monitoring data. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

TAPCR 1200-03-09-.02(11)(e)1(iii)(II)II

B3. Reporting. Reports of any required monitoring and record keeping shall be submitted to the Technical Secretary in accordance with the frequencies specified in the permit conditions for each individual permit unit. Reports shall be submitted within 60 days of the close of the reporting period unless otherwise noted. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. Reports required under "State only requirements" are not required to be certified by a responsible official.

TAPCR 1200-03-09-.02(11)(e)1(iii)

B4. Certification. Except for reports required under "State Only" requirements, any application form, report or compliance certification submitted pursuant to the requirements of this permit shall contain certification by a responsible official of truth, accuracy and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

TAPCR 1200-03-09-.02(11)(d)4

B5. Annual compliance certification. The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

(a) The identification of each term or condition of the permit that is the basis of the certification;

(b) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;

(c) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in B5(b) above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and

(d) Such other facts as the Technical Secretary may require to determine the compliance status of the source.

* "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol.62, No.204, October 22, 1997, pages 54946 and 54947

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol. 79, No.144, July 28, 2014, pages 43661 through 43667

B6. Submission of compliance certification.

The compliance certification shall be

submitted to:

The Tennessee Department of
Environment and Conservation
Environmental Field Office
specified in Section E of this
permit

and

Air and EPCRA Enforcement
Branch
US EPA Region IV
61 Forsyth Street, SW
Atlanta, Georgia 30303

TAPCR 1200-03-09-.02(11)(e)3(v)(IV)

B7. Emergency provisions. An emergency constitutes an affirmative defense to an enforcement action brought against this source for noncompliance with a technology based emission limitation due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

(a) The affirmative defense of the emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An emergency occurred and that the permittee can identify the probable cause(s) of the emergency. "Probable" must be supported by a credible investigation into the incident that seeks to identify the causes and results in an explanation supported by generally accepted engineering or scientific principles.

2. The permitted source was at the time being properly operated. In determining whether or not a source was being properly operated, the Technical Secretary shall examine the source's written standard operating procedures which were in effect at the time of the noncompliance and any other code as detailed below that would be relevant to preventing the noncompliance. Adherence to the source's standard operating procedures will be the test of adequate preventative maintenance, careless operation, improper operation or operator error to the extent that such adherence would prevent noncompliance. The source's failure to follow recognized standards of practice to the extent that adherence to such a standard would have prevented noncompliance will disqualify the source from any claim of an emergency and an affirmative defense.

3. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

4. The permittee submitted notice of the emergency to the Technical Secretary according to the notification criteria for malfunctions in rule 1200-03-020-.03. For the purposes of this condition, "emergency" shall be substituted for "malfunction(s)" in rule 1200-03-020-.03 to determine the relevant notification threshold. The notice shall include a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding the permittee seeking to establish the occurrence of an emergency has the burden of proof.

(c) The provisions of this condition are in addition to any emergency, malfunction or upset requirement contained in Division 1200-03 or other applicable requirement.

TAPCR 1200-03-09-.02(11)(e)7

B8. Excess emissions reporting.

(a) The permittee shall promptly notify the Technical Secretary when any emission source, air pollution control equipment, or related facility breaks down in such a manner to cause the emission of air contaminants in excess of the applicable emission standards contained in Division 1200-03 or any permit issued thereto, or of sufficient duration to cause damage to property or public health. The permittee must provide the Technical Secretary with a statement giving all pertinent facts, including the estimated duration of the breakdown. Violations of the visible emission standard which occur for less than 20 minutes in one day (midnight to midnight) need not be reported. Prompt notification will be within 24 hours of the malfunction and shall be provided by telephone to the Division's Nashville office. The Technical Secretary shall be notified when the condition causing the failure or breakdown has been corrected. In attainment and unclassified areas if emissions other than from sources designated as significantly impacting on a nonattainment area in excess of the standards will not and do not occur over more than a 24-hour period (or will not recur over more than a 24-hour period) and no damage to property and or public health is anticipated, notification is not required.

(b) Any malfunction that creates an imminent hazard to health must be reported by telephone immediately to the Division's Nashville office at (615) 532-0554 and to the State Civil Defense.

(c) A log of all malfunctions, startups, and shutdowns resulting in emissions in excess of the standards in Division 1200-03 or any permit issued thereto must be kept at the plant. All information shall be entered in the log no later than twenty-four (24) hours after the startup or shutdown is complete, or the malfunction has ceased or has been corrected. Any later discovered corrections can be added in the log as footnotes with the reason given for the change. This log must record at least the following:

1. Stack or emission point involved
2. Time malfunction, startup, or shutdown began and/or when first noticed

3. Type of malfunction and/or reason for shutdown
4. Time startup or shutdown was complete or time the air contaminant source returned to normal operation
5. The company employee making entry on the log must sign, date, and indicate the time of each log entry

The information under items 1. and 2. must be entered into the log by the end of the shift during which the malfunction or startup began. For any source utilizing continuous emission(s) monitoring, continuous emission(s) monitoring collection satisfies the above log keeping requirement.

TAPCR 1200-03-020-.03 and .04

B9. Malfunctions, startups and shutdowns - reasonable measures required.

The

permittee must take all reasonable measures to keep emissions to a minimum during startups, shutdowns, and malfunctions. These measures may include installation and use of alternate control systems, changes in operating methods or procedures, cessation of operation until the process equipment and/or air pollution control equipment is repaired, maintaining sufficient spare parts, use of overtime labor, use of outside consultants and contractors, and other appropriate means. Failures that are caused by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions. This provision does not apply to standards found in 40 CFR, Parts 60 (Standards of performance for new stationary sources), 61 (National emission standards for hazardous air pollutants) and 63 (National emission standards for hazardous air pollutants for source categories).

TAPCR 1200-03-20-.02

B10. Reserved

TAPCR 1200-03-20-.04(2) (no longer a part of the SIP)

B11. Report required upon the issuance of a notice of violation for excess emissions.

The permittee must submit within twenty (20) days after receipt of the notice of violation, the data shown below to assist the Technical Secretary in deciding whether to excuse or validate the violation. If this data has previously been available to the Technical Secretary prior to the issuance of the notice of violation no further action is required of the violating source. However, if the source desires to submit additional information, then this must be submitted within the same twenty (20) day time period. The minimum data requirements are:

- (a) The identity of the stack and/or other emission point where the excess emission(s) occurred;
- (b) The magnitude of the excess emissions expressed in pounds per hour and the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
- (c) The time and duration of the emissions;
- (d) The nature and cause of such emissions;
- (e) For malfunctions, the steps taken to correct the situation and the action taken or planned to prevent the recurrence of such malfunctions;
- (f) The steps taken to limit the excess emissions during the occurrence reported, and
- (g) If applicable, documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good operating practices for minimizing emissions.

Failure to submit the required report within the twenty (20) day period specified shall preclude the admissibility of the data for consideration of excusal for malfunctions.

Permit Number 569924

Expiration Date: Five years minus one day from issuance

TAPCR 1200-03-020-.06 (2), (3) and (4)

SECTION C

PERMIT CHANGES

- C1. Operational flexibility changes.** The source may make operational flexibility changes that are not addressed or prohibited by the permit without a permit revision subject to the following requirements:
- (a) The change cannot be subject to a requirement of Title IV of the Federal Act or Chapter 1200-03-30.
 - (b) The change cannot be a modification under any provision of Title I of the federal Act or Division 1200-03.
 - (c) Each change shall meet all applicable requirements and shall not violate any existing permit term or condition.
 - (d) The source must provide contemporaneous written notice to the Technical Secretary and EPA of each such change, except for changes that are below the threshold of levels that are specified in Rule 1200-03-09-.04.
 - (e) Each change shall be described in the notice including the date, any change in emissions, pollutants emitted, and any applicable requirements that would apply as a result of the change.
 - (f) The change shall not qualify for a permit shield under the provisions of part 1200-03-09-.02(11)(e)6.
 - (g) The permittee shall keep a record describing the changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. The records shall be retained until the changes are incorporated into subsequently issued permits.

TAPCR 1200-03-09-.02(11)(a)4 (ii)

- C2. Section 502(b)(10) changes.**
- (a) The permittee can make certain changes without requiring a permit revision, if the changes are not modifications under Title I of the Federal Act or Division 1200-03 and the changes do not exceed the emissions allowable under the permit. The permittee must, however, provide the Administrator and Technical Secretary with written notification within a minimum of 7 days in advance of the proposed changes. The Technical Secretary may waive the 7 day advance notice in instances where the source demonstrates in writing that an emergency necessitates the change. Emergency shall be demonstrated by the criteria of TAPCR 1200-03-09-.02(11)(e)7 and in no way shall it include changes solely to take advantages of an unforeseen business opportunity. The Technical Secretary and EPA shall attach each such notice to their copy of the relevant permit.
 - (b) The written notification must be signed by a facility Title V responsible official and include the following:
 - 1. brief description of the change within the permitted facility;
 - 2. specifies the date on which the change will occur;
 - 3. declares and quantifies where possible any change in emissions;
 - 4. declares any permit term or condition that is no longer applicable as a result of the change; and
 - 5. declares the requested change is not a Title I modification and will not exceed allowable emissions under the permit.
 - (c) The permit shield provisions of TAPCR 1200-03-09-.02(11)(e)6 shall not apply to Section 502(b)(10) changes.

TAPCR 1200-03-09-.02(11)(a)4 (i)

- C3. Administrative amendment.**

(a) Administrative permit amendments to this permit shall be in accordance with 1200-03-09-.02(11)(f)4. The source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.

(b) The permit shield shall be extended as part of an administrative permit amendment revision consistent with the provisions of TAPCR 1200-03-09-.02(11)(e)6 for such revisions made pursuant to item (c) of this condition which meet the relevant requirements of TAPCR 1200-03-09-.02(11)(e), TAPCR 1200-03-09-.02(11)(f) and TAPCR 1200-03-09-.02(11)(g) for significant permit modifications.

(c) Proceedings to review and grant administrative permit amendments shall be limited to only those parts of the permit for which cause to amend exists, and not the entire permit.

TAPCR 1200-03-09-.02(11)(f)4

C4. Minor permit modifications.

(a) The permittee may submit an application for a minor permit modification in accordance with TAPCR 1200-03-09-.02(11)(f)5(ii).

(b) The permittee may make the change proposed in its minor permit modification immediately after an application is filed with the Technical Secretary.

(c) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.

(d) Minor permit modifications do not qualify for a permit shield.

TAPCR 1200-03-09-.02(11)(f)5(ii)

C5. Significant permit modifications.

(a) The permittee may submit an application for a significant modification in accordance with TAPCR 1200-03-09-.02(11)(f)5(iv).

(b) Proceedings to review and modify permits shall be limited to only those parts of the permit for which cause to modify exists, and not the entire permit.

TAPCR 1200-03-09-.02(11)(f)5(iv)

C6. New construction or modifications.

Future construction at this facility that is subject to the provisions of TAPCR 1200-03-09-.01 shall be governed by the following:

(a) The permittee shall designate in their construction permit application the route that they desire to follow for the purposes of incorporating the newly constructed or modified sources into their existing operating permit. The Technical Secretary shall use that information to prepare the operating permit application submittal deadlines in their construction permit.

(b) Sources desiring the permit shield shall choose the administrative amendment route of TAPCR 1200-03-09-.02(11)(f)4 or the significant modification route of TAPCR 1200-03-09-.02(11)(f)5(iv).

(c) Sources desiring expediency instead of the permit shield shall choose the minor permit modification procedure route of TAPCR 1200-03-09-.02(11)(f)5(ii) or group processing of minor modifications under the provisions of TAPCR 1200-03-09-.02(11)(f)5(iii) as applicable to the magnitude of their construction.

TAPCR 1200-03-09-.02(11)(d) 1(i)(V)

SECTION D

GENERAL APPLICABLE REQUIREMENTS

- D1. Visible emissions.** With the exception of air emission sources exempt from the requirements of TAPCR Chapter 1200-03-05 and air emission sources for which a different opacity standard is specifically provided elsewhere in this permit, the permittee shall not cause, suffer, allow or permit discharge of a visible emission from any air contaminant source with an opacity in excess of twenty (20) percent for an aggregate of more than five (5) minutes in any one (1) hour or more than twenty (20) minutes in any twenty-four (24) hour period; provided, however, that for fuel burning installations with fuel burning equipment of input capacity greater than 600 million btu per hour, the permittee shall not cause, suffer, allow, or permit discharge of a visible emission from any fuel burning installation with an opacity in excess of twenty (20) percent (6-minute average) except for one six minute period per one (1) hour of not more than forty (40) percent opacity. Sources constructed or modified after July 7, 1992 shall utilize 6-minute averaging.

Consistent with the requirements of TAPCR Chapter 1200-03-020, due allowance may be made for visible emissions in excess of that permitted under TAPCR 1200-03-05 which are necessary or unavoidable due to routine startup and shutdown conditions. The facility shall maintain a continuous, current log of all excess visible emissions showing the time at which such conditions began and ended and that such record shall be available to the Technical Secretary or his representative upon his request.

TAPCR 1200-03-05-.01(1), TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.02(1)

- D2. General provisions and applicability for non-process gaseous emissions.** Any person constructing or otherwise establishing a non-portable air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize the best equipment and technology currently available for controlling such gaseous emissions.

TAPCR 1200-03-06-.03(2)

- D3. Non-process emission standards.** The permittee shall not cause, suffer, allow, or permit particulate emissions from non-process sources in excess of the standards in TAPCR 1200-03-06.

- D4. General provisions and applicability for process gaseous emissions.** Any person constructing or otherwise establishing an air contaminant source emitting gaseous air contaminants after April 3, 1972, or relocating an air contaminant source more than 1.0 km from the previous position after November 6, 1988, shall install and utilize equipment and technology which is deemed reasonable and proper by the Technical Secretary.

TAPCR 1200-03-07-.07(2)

- D5. Particulate emissions from process emission sources.** The permittee shall not cause, suffer, allow, or permit particulate emissions from process sources in excess of the standards in TAPCR 1200-03-07.

- D6. Sulfur dioxide emission standards.** The permittee shall not cause, suffer, allow, or permit Sulfur dioxide emissions from process and non-process sources in excess of the standards in TAPCR 1200-03-14. Regardless of the specific emission standard, new process sources shall utilize the best available control technology as deemed appropriate by the Technical Secretary of the Tennessee Air Pollution Control Board.

D7. Fugitive Dust.

(a) The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which can create airborne dusts;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

(b) The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Chapter 1200-03-020.

TAPCR 1200-03-08

D8. Open burning. The permittee shall comply with the TAPCR 1200-03-04 for all open burning activities at the facility.

TAPCR 1200-03-04

D9. Asbestos. Where applicable, the permittee shall comply with the requirements of 1200-03-11-.02(2)(d) when conducting any renovation or demolition activities at the facility.

TAPCR 1200-03-11-.02(2)(d) and 40 CFR, Part 61

D10. Annual certification of compliance. The generally applicable requirements set forth in Section D of this permit are intended to apply to activities and sources that are not subject to source-specific applicable requirements contained in State of Tennessee and U.S. EPA regulations. By annual certification of compliance, the permittee shall be considered to meet the monitoring and related record keeping and reporting requirements of TAPCR 1200-03-09-.02(11)(e)1.(iii) and 1200-03-10-.04(2)(b)1 and compliance requirements of TAPCR 1200-03-09-.02(11)(e)3.(i). The permittee shall submit compliance certification for these conditions annually.

SECTION E**SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS,
and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS**

37-0080	<u>Facility Description:</u>	BFI Waste Systems of Tennessee, LLC, DBA Carter Valley Landfill is a municipal solid waste landfill located in Church Hill. The facility is subject to the NSPS requirements of 40 CFR 60 Subpart WWW for Municipal Solid Waste Landfills. This facility is also subject to the MACT requirements of 40 CFR 63 Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfill and NESHAP requirements of 40 CFR 61 Subpart M (National Emission Standards for Asbestos). Currently 113.5 acres of the landfill facility are permitted for solid waste disposal. BFI Carter Valley Landfill operates an existing landfill gas collection and control system with an open (utility) flare for gas combustion.
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Conditions E1 and E2 apply to this source for fee payment, reporting, and other general requirements.

E1. Fee payment: actual emissions basis.**FEE EMISSIONS SUMMARY TABLE FOR MAJOR SOURCE 37-0080**

REGULATED POLLUTANTS	ALLOWABLE EMISSIONS (tons per AAP)	ACTUAL EMISSIONS (tons per AAP)	COMMENTS
PARTICULATE MATTER (PM)	N/A	N/A	
PM ₁₀	N/A	N/A	
SO ₂	N/A	N/A	
VOC	N/A	AEAR	See Notes Below ****
NO _x	N/A	N/A	
CATEGORY OF MISCELLANEOUS HAZARDOUS AIR POLLUTANTS (HAP WITHOUT A STANDARD) *			
VOC FAMILY GROUP	N/A	N/A	See Notes Below ****
NON-VOC GASEOUS GROUP	N/A	N/A	See Notes Below ****
PM FAMILY GROUP	N/A	N/A	
CATEGORY OF SPECIFIC HAZARDOUS AIR POLLUTANTS (HAP WITH A STANDARD) **			
VOC FAMILY GROUP	N/A	N/A	
NON-VOC GASEOUS GROUP	N/A	N/A	
PM FAMILY GROUP	N/A	N/A	
CATEGORY OF NSPS POLLUTANTS NOT LISTED ABOVE***			
EACH NSPS POLLUTANT NOT LISTED ABOVE	N/A	N/A	

NOTES

AAP The Annual Accounting Period (AAP) is a twelve (12) consecutive month period that begins each July 1st and ends June 30th of the following year. The present Annual Accounting Period began July 1, 2016, and ends June 30, 2017. The next Annual Accounting Period begins July 1, 2017 and ends June 30, 2018.

N/A **N/A** indicates that no emissions are specified for fee computation.

AEAR **AEAR** indicates that an **Actual Emissions Analysis** is **Required** to determine the actual emissions of:

- (1) **each regulated pollutant** (Particulate matter, SO₂, VOC, NO_x and so forth. See TAPCR 1200-03-26-.02(2)(i) for the definition of a regulated pollutant.),
 - (2) **each pollutant group** (VOC Family, Non-VOC Gaseous, and Particulate Family), and
 - (3) **the Miscellaneous HAP Category**
- under consideration during the **Annual Accounting Period**.

***** **Category Of Miscellaneous HAP (HAP Without A Standard):** This category is made-up of hazardous air pollutants that do not have a federal or state standard. Each HAP is classified into one of three groups, the **VOC Family** group, the **Non-VOC Gaseous** group, or the **Particulate (PM) Family** group. **For fee computation,** the **Miscellaneous HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

****** **Category Of Specific HAP (HAP With A Standard):** This category is made-up of hazardous air pollutants (HAP) that are subject to Federally promulgated Hazardous Air Pollutant Standards that can be imposed under Chapter 1200-03-11 or Chapter 1200-03-31. Each individual hazardous air pollutant is classified into one of three groups, the **VOC Family** group, the **Non-VOC Gaseous** group, or the **Particulate (PM) Family** group. **For fee computation,** each individual hazardous air pollutant of the **Specific HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

******* **Category Of NSPS Pollutants Not Listed Above:** This category is made-up of each **New Source Performance Standard (NSPS)** pollutant whose emissions are not included in the **PM, SO₂, VOC or NO_x** emissions from each source in this permit. **For fee computation,** each **NSPS pollutant not listed above** is subject to the 4,000 ton cap provisions of subparagraph 1200-03-26-.02(2)(i).

END NOTES

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- The permittee shall:**
- (1) Pay major source annual **actual based emission fees**, as requested by the responsible official, for each annual accounting period (AAP) by July 1 of each year.
 - (2) Prepare an **actual emissions analysis** in accordance with the above **Fee Emissions Summary Table** for each AAP (July 1 of each year through June 30 of the following year). The **actual emissions analysis** shall include:
 - (a) the completed **Fee Emissions Summary Table**,
 - (b) each **AEAR** required by the above **Fee Emissions Summary Table**, and
 - (c) the records required by Condition **E3-8** of this permit. These records shall be used to complete the **AEARs** required by the above **Fee Emissions Summary Table**. A summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
 - (4) Submit the **actual emissions analysis** at the time the fees are paid in full.
 - (5) Calculate the fee due based upon the **actual emissions analysis**, and submit the payment on July 1st following the

end of the **annual accounting period**. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-3-26-.02(8). Major sources may request an extension of time to file their emissions analysis with the Technical Secretary as specified in Condition A8(c)5 of this permit. Emissions for regulated pollutants shall not be double counted as specified in Condition A8(d) of this permit.

- (6) Calculate the fee due based upon the **current NMOC reporting or the minimum Title V fee**, and submit the payment on July 1st following the end of the **annual accounting period**. If any part of any fee imposed under TAPCR 1200-03-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-03-26-.02(8). Major sources may request an extension of time to file their emissions analysis with the Technical Secretary as specified in Condition A8(c)5 of this permit. Emissions for regulated pollutants shall not be double counted as specified in Condition A8(d) of this permit.

The actual emissions analysis shall be submitted to The Technical Secretary at the address below:

Division of Air Pollution Control (or electronic pdf copy to :
Air.Pollution.Control@tn.gov)
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

Payment of the fee due shall be submitted to the following address:

Tennessee Department of Environment and Conservation
Division of Fiscal Services
Consolidated Fee Section - APC
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Ave. 10th Floor
Nashville, TN 37243

TAPCR 1200-03-26-.02 (3) and (9), and 1200-03-09-.02(11)(e)1 (iii) and (vii)

E2. General Facility Conditions

E2-1. Reporting requirements.

- (a) **Semiannual reports.** Semiannual reports shall cover the six-month periods from **January 1 through June 30** of each calendar year and from **July 1 through December 31** of each calendar year. The reports shall be submitted within 60 days after the end of each six-month reporting period. Semiannual reports of this facility (**37-0080**) shall include:

- (1) Any monitoring and recordkeeping required by Conditions **E2-1(C) and E3-17** of this permit. A summary report of this data is acceptable provided there is sufficient information to enable the Technical

Secretary to evaluate compliance. All data shall be presented in a clear, legible format that allows the Technical Secretary to evaluate compliance.

- (2) Any applicable semiannual reports otherwise required by 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories) may be submitted as a part of the semiannual report required by **Condition E2-1(a)** of this permit. A summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.
- (3) Identification of all instances of deviations from **ALL PERMIT REQUIREMENTS**.

These reports shall be submitted to The Technical Secretary at the address in Condition E2-1(b) of this permit.

TAPCR 1200-03-09-.02(11)(e)1.(iii)

- (b) **Annual compliance certification.** The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

- (1) The identification of each term or condition of the permit that is the basis of the certification;
 - (2) The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period; Such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;
 - (3) The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in E2-1(b)2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an *excursion or **exceedance as defined below occurred; and
 - (4) Such other facts as the Technical Secretary may require to determine the compliance status of the source.
- * "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

These certifications shall be submitted within 60 days after the end of each calendar year. These certifications shall be submitted to: Tennessee Division of Air Pollution Control TN APCD and EPA

**The Technical Secretary
Branch
Division of Air Pollution Control
Region IV**

(or electronic pdf copy to :APC.JCEFO@tn.gov)
**ATTN: Air Pollution Control
Johnson City Environmental Field Office
2305 Silverdale Road
Johnson City, TN 37601-2162**

Air and EPCRA Enforcement

US EPA

**61 Forsyth Street, SW
Atlanta, Georgia 30303**

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol.62, No.204, October 22, 1997, pages 54946 and 54947.

(c) NSPS and MACT semiannual reports. The permittee shall submit MACT and NSPS semiannual reports of the recorded information outlined below. The report shall be due within 60 days after the end of each reporting period identified in Condition E2-1(a) of this permit. These reports must be certified by a responsible official consistent with condition B4 of this permit and shall be submitted to The Technical Secretary at the address in Condition E2-1(b) of this permit. Each report must include the following:

- (1)** Value and length of time for exceedance of applicable parameters monitored under 40 CFR §60.756(a) and (c) (see Conditions E3-2 and E3-4);
- (2)** Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating (see Condition E3-2);
- (3)** All periods when the collection system was not operating in excess of 5 days;
- (4)** The location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR §60.753 (d) (see **Condition E3-7**) and the concentration recorded at each location for which an exceedance was recorded in the previous month; and
- (5)** The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR §60.755(a)(3), (b), and (c)(4) (see **Conditions E3-4(a), E3-5, and E3-7(b)**).
- (6)** Startup, shutdown, and malfunction reports required by **Condition E3-12 (b)**.
- (7)** Results of initial open flare performance test, if applicable (see **Condition E3-9**).
- (8)** Any monitoring and recordkeeping require by **Condition E3-17** and Attachment 2 of this permit.

TAPCR 1200-03-09-.03(8); TAPCR 1200-03-09-.02(11)(e)1(iii); 40 CFR §§60.757(f) and 63.1980

Compliance Method: Included with the requirement.

E2-2. Recordkeeping: Data Entry Requirements

- (a) For monthly recordkeeping, all data, including results of all calculations, must be entered into the log no later than thirty (30) days from the end of the month for which the data is required.
- (b) For weekly recordkeeping, all data, including results of all calculations, must be entered into the log no later than thirty (30) days from the end of the week for which the data is required.
- (c) For daily recordkeeping, all data, including results of all calculations, must be entered into the log no later than thirty (30) days from the end of the day for which the data is required.

TAPCR 1200-03-10-.02(1) (a)

E2-3. Visible Emissions Evaluation: General Requirements: For all emission sources that use the opacity matrix decision trees (Attachment 1) to comply with any visible emissions requirement, including emission sources for which visible emissions are not required by the opacity matrix, if the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

TAPCR 1200-03-10-.02(1) (a)

E2-4. Identification of Responsible Official, Technical Contact, and Billing Contact:

a) The application that was utilized in the preparation of this permit is dated February 9, 2015, and signed by Stephen Slater, General Manager, Responsible Official, of the permitted facility. If this person terminates employment or is assigned different duties and is no longer a Responsible Official for this facility as defined in part 1200-03-09-.02(11)(b)21 of the Tennessee Air Pollution Control Regulations, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Responsible Official and certification of truth and accuracy. All representations, agreement to terms and conditions, and covenants made by the former Responsible Official that were used in the establishment of the permit terms and conditions will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements, and/or covenants.

b) The application that was utilized in the preparation of this permit is dated February 9, 2015, and identifies Mike Loyd, as the Principal Technical Contact for the permitted facility. Additional information was received by email on June 17, 2016, and identifies Derek Bouchard as the Principle Technical Contact for this facility. If this person terminates employment or is assigned different duties and is no longer the Principal Technical Contact for this facility, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification must be in writing and must be submitted within thirty (30) days of the change. The notification shall include the name and title of the new Principal Technical Contact and certification of truth and accuracy.

TAPCR 1200-03-09-.02(6)

E2-5. The permittee shall comply with all applicable federal and state regulations concerning the operation of the sources in this permit unless specifically allowed by the Conditions of this permit. This includes, but is no limited to, federal regulations published under 40 CFR part 63 for sources of hazardous air pollutants and 40 CFR part 60, New Source Performance Standards.

TAPCR 1200-03-09-.03(8)

E2-6. The sources in this permit shall operate in accordance with the terms of this permit and the information submitted in the approved application.

TAPCR 1200-03-09-.02(6)

E2-7. Asbestos: This landfill receives, handles, and disposes of asbestos containing material. The handling and disposal of regulated-asbestos-containing material must be managed in accordance with those applicable requirements in the current **National Emission Standard for Asbestos of 40 CFR Part 61 Subpart M** and the current Rule 1200-03-11-.02 of the Tennessee Air Pollution Control Regulations (TAPCR) listed in Attachments 3 and 4 of this permit. It should be noted this is no new requirement, and the existing regulations have been in place. However, regulatory citations are now included in this permit to explicitly specify the requirements. Upon receipt of asbestos at the landfill, the permittee is subject to the **Standard for Active Disposal Sites** per Rule 1200-03-11-.02(5) of the TAPCR and the federal counterpart 40 CFR §61.154. Upon closure of an active disposal site, the permittee shall comply with the provisions of Rule 1200-03-11-.02(2)(I) of the TAPCR entitled **Standard for Inactive Waste Disposal Sites for Asbestos Mills and Manufacturing and Fabricating Operations** and the federal counterpart 40 CFR §61.151.

TAPCR 1200-03-11-.02, TAPCR 1200-03-09-.03(8) and 40 CFR Part 61 Subpart M

37-0080	<u>Facility Description:</u>	BFI Waste Systems of Tennessee, LLC, DBA Carter Valley Landfill is a municipal solid waste landfill located in Church Hill. The facility is subject to the NSPS requirements of 40 CFR 60 Subpart WWW for Municipal Solid Waste Landfills and the MACT requirements of 40 CFR 63 Subpart AAAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfill and NESHAP requirements of 40 CFR 61 Subpart M (National Emission Standards for Asbestos). Currently 113.5 acres of the landfill facility are permitted for solid waste disposal. BFI Carter Valley Landfill operates an existing landfill gas collection and control system with an open (utility) flare for gas combustion.
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Conditions E3-1 through E3-17 apply to facility 37-0080

E3-1. The existing landfill gas collection system is controlled by an open flare and /or routed to a third-party operated landfill gas treatment system at the BFI-Carter Valley Landfill. The flare is subject to TAPCR 1200-03-16-.01(11) and 40 CFR §60.18, which require the following for flares:

- (a) The flare shall be designed for and operated with no visible emissions as determined by Reference Method 22 with a consecutive 2-hour observation period, except for periods not to exceed a total of five minutes during any two consecutive hours.
- (b) At any time when any portion of the landfill gas is not routed to the third-party landfill gas treatment system, the flare shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or some other equivalent device. At any time that a flame is not present at the flare tip, the system should be shut down immediately;
- (c) The net heating value of the gas being combusted must be 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or the net heating value of the gas being combusted must be 7.45 MJ/scm (200 Btu/scf) or greater for non-assisted flares. The net heating value of the gas being combusted shall be determined by the methods specified in TAPCR 1200-03-16-.01(11)(f); and

- (d) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in TAPCR 1200-03-16-.01(11)(f)4 less than 18.3 m/sec (60 ft/sec), except as provided in (ii) and (iii) below.
 - (ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in TAPCR 1200-03-16-.01(11)(f)4 equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1000 Btu/scf).
 - (iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in TAPCR 1200-03-16-.01(11)(f)4 less than velocity, V_{max} , as determined by the method specified in TAPCR 1200-03-16-.01(11)(f)5 and less than 122 m/sec (400 ft/sec) are allowed.
- (e) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V_{max} , as determined by the methods specified in TAPCR 1200-03-16-.01(11)(f)6.
- (f) Flares shall be steam-assisted, air-assisted, or nonassisted.

Compliance with this condition shall be assured by a flare performance test as required by **Condition E3-9** (new or reconstructed flares only) and the operation and monitoring of control equipment required by **Condition E3-2**.

TAPCR 1200-03-09-.02(11)(e)1.(iii), 1200-03-16-.01(11)(b), (c), (d), (e), and (f); TAPCR 1200-03-09-.03(8); 40 CFR §60.752 and 40 CFR §60.18

E3-2. For open flares, the installation, calibration, maintenance, and operation of the following equipment is required:

- (a) At any time when any portion of the landfill gas is not routed to the third-party landfill gas treatment system, the flare shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or some other equivalent device. At any time that a flame is not present at the flare tip, the system shall be shut down immediately;
- (b) The open flares used to control landfill gas emissions at this facility do not utilize a bypass line, and the NSPS requirement to record the bypass of the flare does not apply to this facility. Except as noted in **Condition E3-2(a)**, the permittee shall not modify the gas collection system to allow bypass of the flare.

Compliance with this condition shall be assured by compliance with **Condition E3-11** of this permit.

TAPCR 1200-03-09-.02(11)(e)1.(iii), TAPCR 1200-03-09-.03(8); 40 CFR §60.756(c)

E3-3. Except as otherwise allowed by **Condition E3-17** of this permit, the permittee shall operate each interior wellhead in the collection system with a negative pressure (except as noted in 40 CFR §60.753(b)), a landfill gas temperature less than 55° C (131° F), and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. The

oxygen content of the LFG shall be established in accordance with **Condition E3-17(b)** of this permit.

Compliance with this condition shall be assured by compliance with **Condition E3-4** of this permit.

TAPCR 1200-03-09-.02(11)(e)1.(iii), TAPCR 1200-03-09-.03(8); 40 CFR §60.753(b) and (c)

E3-4. The permittee shall install a sampling port and a thermometer or other temperature measuring device, or an access port for temperature measurements at each wellhead and:

- (a) Measure the gauge pressure in the gas collection header at each individual well on a monthly basis as provided in 40 CFR §60.755(a)(3). If positive pressure exists, corrective action shall be initiated within 5 calendar days to correct the exceedance as specified in 40 CFR §60.755(a)(3). Nonproducing wells shall follow the procedures detailed in Attachment 2, Item 1, of this permit.
- (b) Monitor the temperature of the landfill gas and the nitrogen or oxygen concentration in the landfill gas at each well on a monthly basis as provided in 40 CFR §60.755(a)(5). If a well exceeds either the nitrogen or oxygen operating parameters or the temperature operating parameter of **Condition E3-3**, action shall be initiated to correct the exceedance within 5 calendar days as specified in 40 CFR §60.755(a)(5). Nonproducing wells shall follow the procedures detailed in Attachment 2, Item 1, of this permit.

The compliance provisions of this condition apply at all times, except during periods of start-up, shutdown, or malfunction, provided that start-up, shutdown, or malfunction shall not result in emissions of uncontrolled LFG into the atmosphere to occur for more than one (1) hour for the control device or result in the collection system being down for more than five (5) days. Compliance with this condition shall be assured by compliance with **Condition E3-11** of this permit.

TAPCR 1200-03-09-.02(11)(e)1.(iii); TAPCR 1200-03-09-.03(8); 40 CFR §§ 60.755(a)(3) and (5), 60.755(e), 60.753(g), and 60.756(a)

E3-5. The permittee shall operate the landfill gas collection system such that gas is collected from each area, cell, or group of cells in which solid waste has been in place for:

- (a) 5 years or more if active; or
- (b) 2 years or more if closed or at final grade

For expansion of the existing gas collection system, each new well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period specified in (a) or (b) of this condition. Compliance with this condition shall be assured by compliance with **Condition E3-13**.

TAPCR 1200-03-09-.02(11)(e)1.(iii); TAPCR 1200-03-09-.03(8); 40 CFR §60.753(a) and 40 CFR §60.755(b)

E3-6. The permittee shall operate the landfill gas collection system (open flare or landfill gas treatment system) such that all collected gases are vented to the control system designed and operated in compliance with 40 CFR §60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system

shall be shut down and all valves in the collection and control system contributing to venting of the gas shall be closed within 1 hour. The control system shall be operated at all times when the collected gas is routed to the system. Compliance with this condition shall be assured by compliance with **Condition E3-11** of this permit.

TAPCR 1200-03-09-.02(11)(e)1.(iii); TAPCR 1200-03-09-.03(8); 40 CFR §60.753(e) and (f)

- E3-7.** (a) The permittee shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill as specified in 40 CFR §60.753(d). Surface testing shall be conducted around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site specific established spacing) and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover, on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR §60.755(d). The permittee may establish an alternative traversing pattern that ensures equivalent coverage. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. Surface monitoring shall be performed in accordance with Section 4.3.1 of Method 21 of Appendix A of Part 60; except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. A surface monitoring design plan that includes an updated topographical map with the surface monitoring route and the rationale for any site-specific deviations from the 30 meter monitoring intervals shall be maintained at the facility. Surface monitoring shall be conducted at each area, cell, or group of cells in which the initial solid waste has been placed for a period of five years or more.
- (b) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in **E3-7(b)(i) through (v)** shall be taken. As long as the following specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR §60.753(d).
- (i) The location of each monitored exceedance shall be marked and the location recorded.
 - (ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.
 - (iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in **E3-7(b)(v)** shall be taken, and no further monitoring of that location is required until the action specified in **E3-7(b)(v)** has been taken.
 - (iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day

re-monitoring specified in E3-7(b)(ii) or (iii) shall be re-monitored no later than one (1) month after the initial exceedance. If the one-month remonitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the one-month remonitoring shows an exceedance, the actions specified in **E3-7(b)(iii) or (v)** shall be taken.

(v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Technical Secretary for approval.

(c) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

The compliance provisions of this condition apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for the control device. Compliance with this condition shall be assured by compliance with **Condition E3-11** of this permit.

TAPCR 1200-03-09-.02(11)(e)1.(iii); TAPCR 1200-03-09-.03(8); 40 CFR §§ 60.753(d) and 60.755(c) and (e)

E3-8. Except as provided in 40 CFR §60.752(b)(2)(i)(B) and **Condition E3-17**, the permittee shall keep for at least five (5) years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR §60.752(b), the current amount of solid waste in place, and the year by year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

TAPCR 1200-03-09-.02(11)(e)1.(iii); TAPCR 1200-03-09-.03(8); 40 CFR §60.758(a)

E3-9. For all new or reconstructed flares installed at this source, an initial open flare performance test shall be conducted in accordance with TAPCR 1200-03-16-.01(11) and 40 CFR §60.8. The performance test shall include an initial visible emissions evaluation, and the test results shall be included in the report required by **Condition E2-1(c)**. At least ten (10) days prior to conducting the performance test, the Technical Secretary shall be given notice of the test date.

E3-10. Except as provided in 40 CFR §60.752(b)(2)(i)(B) and **Condition E3-17**, the source shall keep the following records for the life of the control equipment (open flare) as measured during the most recent flare performance test:

- (a) The flare type (i.e. steam-assisted, air-assisted, or nonassisted);
- (b) All visible emissions readings;
- (c) The heat content determination;
- (d) Flow rate or bypass flow rate measurements; and
- (e) Exit velocity determinations made during the most recent flare performance test;

- (f) Continuous records of the of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent;
- (g) The maximum expected gas generation flow rate as calculated in 40 CFR §60.755(a)(1) and the density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR §60.759(a)(1).

Records of subsequent tests or monitoring shall be maintained for a minimum of five (5) years. Records of control device vendor specifications shall be maintained until removal.

TAPCR 1200-03-09-.02(11)(e)1.(iii); TAPCR 1200-03-09-.03(8); 40 CFR §60.758(b)(1) and (4)

E3-11. Except as provided in 40 CFR §60.752(b)(2)(i)(B), the following records shall be maintained for at least five years and made available for inspection upon request:

- (a) Continuous records of the equipment operating parameters specified to be monitored in **Conditions E3-2 and E3-4**, as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded;
- (b) Records of the flame or flare pilot flame monitoring specified under **Condition E3-2**, and all periods of operation in which the flame or flare pilot flame is absent; and
- (c) Records of all collection and control system exceedances of the operational standards outlined in **Conditions E3-3, E3-5, E3-6, and E3-7**, the reading in the subsequent month, whether or not the second reading is an exceedance, and the location of each exceedance.
- (d) Any records required by **Condition E3-17** and Attachment 2 of this permit.

TAPCR 1200-03-09-.02(11)(e)1.(iii); TAPCR 1200-03-09-.03(8); 40 CFR §60.758(c) and (e)

E3-12. **MACT requirements.** 40 CFR 63 Subpart AAAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste landfills.

- (a) The permittee shall comply with the applicable requirements of 40 CFR Part 63 Subpart AAAAA (National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills), as follows:
 - (a) The permittee shall comply with all applicable requirements of 40 CFR 63.6, Compliance with Standards and Maintenance Requirements, and 40 CFR 63.10(b), General Recordkeeping and Reporting Requirements. This includes the requirement to develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standards as required by §63.1960. The plan must include the following minimum plan elements:

- (i) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - (ii) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (b) *Periodic startup, shutdown, and malfunction reports.* If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan (see §63.6(e)(3)), the owner or operator shall state such information in a startup, shutdown, and malfunction report. Such a report shall identify any instance where any action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the affected source's startup, shutdown, and malfunction plan, but the source does not exceed any applicable emission limitation in the relevant emission standard. Such a report shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner, operator, or other responsible official who is certifying its accuracy. The startup, shutdown, and malfunction report shall be submitted with the semiannual report required by **Condition E2-1(c)**.
- (c) *Immediate startup, shutdown, and malfunction reports.* At any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph (d)(5)(ii) shall consist of a telephone call (or facsimile transmission) to the Technical Secretary within 2 working days, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event. The letter shall contain the name, title, and signature of the owner, operator, or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred.

TAPCR 1200-03-09-.03(8); 40 CFR §§ 63.6, 63.1960, 63.1980

E3-13. Except as provided in 40 CFR §60.752(b)(2)(i)(B) and **Condition E3-17**, the permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

- (a) The permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified in **Condition E3-5**.

- (b) The permittee shall keep up-to-date, readily accessible records of the nature, date of deposition, amount, and location of asbestos-containing or non-degradable waste excluded from collection as provided in 40 CFR §60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR §60.759(a)(3)(ii).

TAPCR 1200-03-09-.02(11)(e)1.(iii); TAPCR 1200-03-09-.03(8); 40 CFR §60.758(d)

E3-14. If the controlled landfill ceases operation, the permittee shall submit to the Technical Secretary a closure report within thirty (30) days of waste acceptance cessation. The Technical Secretary may request additional information as may be necessary to verify that permanent closure has taken place. If a closure report has been submitted to the Technical Secretary, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR §60.7(a)(4).

TAPCR 1200-03-09-.02(11)(e)1.(iii); TAPCR 1200-03-09-.03(8); 40 CFR §60.757(d)

E3-15. The permittee shall submit an equipment removal report to the Technical Secretary thirty (30) days prior to the removal or cessation of operation of the control equipment. The report shall contain the following items:

- (a) A copy of the closure report submitted in accordance with 40 CFR §60.757(d) (see **Condition E3-14**;
- (b) A copy of the initial performance test report demonstrating that the fifteen (15) year minimum control period has expired; and
- (c) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

The Technical Secretary may request additional information as may be necessary to verify that all of the conditions for removal specified in **Condition E3-16** have been met.

TAPCR 1200-03-09-.02(11)(e)1.(iii); TAPCR 1200-03-09-.03(8); 40 CFR §60.757(e)

E3-16. The collection and control system may be capped or removed provided that all of the following conditions are met:

- (a) The landfill shall be a closed landfill as defined in 40 CFR §60.751. A closure report shall be submitted to the Technical Secretary as provided in 40 CFR §60.757(d) (see **Condition E3-14**);
- (b) The collection and control system shall have been in operation a minimum of fifteen (15) years; and
- (c) Following the procedures specified in 40 CFR §60.754(b), the calculated NMOC gas produced by the landfill shall be less than fifty (50) megagrams per year on three (3) successive test dates. The test dates shall be no less than ninety (90) days apart, and no more than one hundred eighty (180) days apart.

TAPCR 1200-03-09-.02(11)(e)1.(iii); TAPCR 1200-03-09-.03(8); 40 CFR §60.752(b)(2)(v)

E3-17. The permittee shall operate the gas collection system at this facility in accordance with the design plan submitted for this facility in accordance 40 CFR §60.752(b)(2).

Revisions to the approved design plan shall be prepared by a professional engineer, in accordance with 40 CFR §60.752(b)(1)(ii).

- (a) The collection and control system as described in the plan shall meet the design requirements of 40 CFR §60.752 (b) (2) (ii).
- (b) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 40 CFR §§60.753 through 60.758 proposed by the owner or operator. Approved alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 40 CFR §§60.753 through 60.758 are listed in Attachment 2 of this permit.
- (c) The collection and control system design plan shall either conform with specifications for active collection systems in 40 CFR §60.759 or include a demonstration of the sufficiency of the alternative provisions to 40 CFR §60.759.

TAPCR 1200-03-09-.03(8); 40 CFR §60.752(b)(2)

END OF PERMIT NUMBER 569924

ATTACHMENT 1

**OPACITY MATRIX DECISION TREE for
VISIBLE EMISSION EVALUATION METHOD 9
DATED SEPTEMBER 11, 2013**

**Decision Tree PM for Opacity for
Sources Utilizing EPA Method 9***

Notes:

PM = Periodic Monitoring required by 1200-03-09-.02(11)(e)(iii).

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emission standards set forth in the permit. It is not intended to determine compliance requirements for EPA's Compliance Assurance Monitoring (CAM) Rule (formerly referred to as Enhanced Monitoring - Proposed 40 CFR 64).

Examine each emission unit using this Decision Tree to determine the PM required.*

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing EPA Method 9. The observer must be properly certified to conduct valid evaluations.

Typical Pollutants

Particulates, VOC, CO, SO₂, NO_x, HCl, HF, HBr, Ammonia, and Methane.

Initial observations are to be repeated within 90 days of startup of a modified source, if a new construction permit is issued for modification of the source.

A VEE conducted by TAPCD personnel after the Title V permit is issued will also constitute an initial reading.

Reader Error

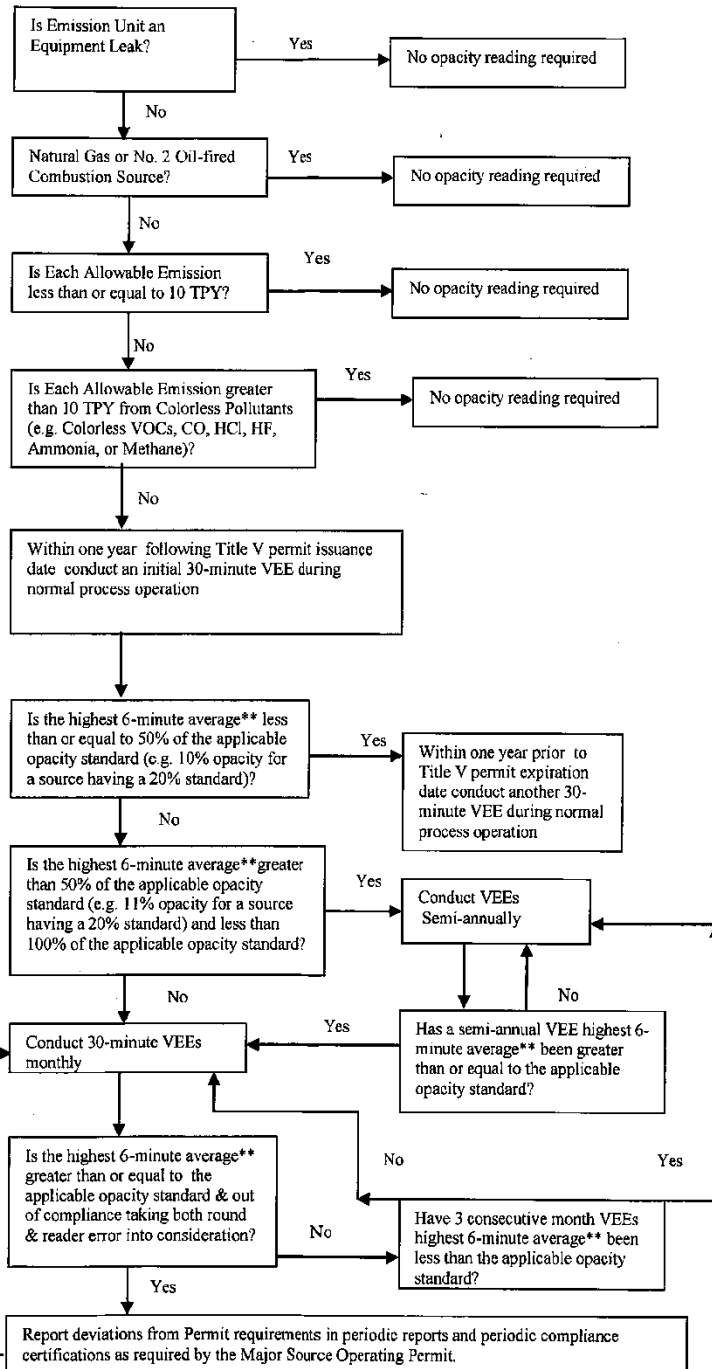
EPA Method 9, Non-NSPS or NESHAPS stipulated opacity standards: The TAPCD guidance is to declare non-compliance when the highest six-minute average** exceeds the standard plus 6.8% opacity (e.g. 26.8% for a 20% standard).

EPA Method 9, NSPS or NESHAPS stipulate opacity standards: EPA guidance is to allow only engineering round. No allowance for reader error is given.

*Not applicable to Asbestos manufacturing subject to 40 CFR 61.142

**Or second highest six-minute average, if the source has an exemption period stipulated in either the regulations or in the permit.

Dated June 18, 1996
Amended September 11, 2013



ATTACHMENT 2

**NSPS COMPLIANCE ALTERNATIVES
FOR CARTER VALLEY LANDFILL**

**Approved NSPS Alternatives for BFI Carter Valley Landfill
Gas Collection and Control System (GCCS) Design Plan dated May 24, 2012, and Revisions
dated April 10, 2013**

1. **Nonproductive Wells:** The following procedure is approved for nonproductive wells.
- (a) A landfill gas extraction well that exhibits oxygen concentrations exceeding 5% by volume shall be identified as a nonproducing well if oxygen concentrations do not decline to acceptable levels after more than one hour of reduced vacuum.
 - (b) The permittee shall continue to monitor nonproducing wells in accordance with **Condition E3-4** of this permit, but nonproducing wells shall be exempt from NSPS operating requirements of **Condition E3-3** (positive pressure, temperature exceedances, and oxygen concentration exceedances will not be considered deviations).
 - (c) The valve on non-producing wells will be closed during normal GCCS operations until the gas quality at the well recovers.
 - (d) If monthly monitoring indicates that pressure has built up in the well and the oxygen concentration still exceeds five percent, the well will be opened to relieve the pressure and will be shut down until it is monitored the following month.
 - (e) Should static landfill gas concentrations at the well increase to levels considered typical for anaerobic conditions (i.e., oxygen concentration below 5% by volume), the wellhead control valve will be opened, and the well will be operated in accordance with the requirements of **Condition E3-3** of this permit. If the well(s) return to nonproducing characteristics, the wells will be shut off and deemed exempt from NSPS operating requirements.
 - (f) If methane surface emissions near the well exceed 500 parts per million above background, the permittee shall evaluate the area and implement corrective measures as required by 40 CFR §60.755(b)(4) and **Condition E3-7(b)** of this permit, including the reactivation of nonproducing wells as needed.
 - (g) A record of all nonproducing wells shall be maintained at the facility and made available for inspection by the Technical Secretary or his representative upon request. These records must be retained for a period of not less than five (5) years.

2. **Temperature Exceedances for Gas Collection Wells**

The following alternative procedure is approved to address temperature exceedances for gas collection wells:

- (a) Wells exhibiting operating temperatures above 131° F, but below 160° F with no signs of smoke, will be operated, monitored, and reported at their operating temperature with no further NSPS action required. However, if it is suspected that a subsurface oxidation is occurring at the well(s), the situation will be further investigated (e. g., wells will be tested for elevated carbon monoxide, monitored for visible evidence of combustion, etc.). If it is confirmed that subsurface oxidation is present, the well(s) will be shut off as provided for under 40 CFR §60.753(b)(1), and corrective measures shall be implemented. The permittee shall report any wells shut down due to potential subsurface oxidation in the semiannual report required by **Condition E2-1(a)** of this permit.

- (b) Wells exhibiting operating temperatures above 160°F shall be field-tested for hydrogen gas.
 - (i) If the test indicates hydrogen concentrations above 1% by volume, the well shall be identified as an aluminum waste reaction (AWR) well. The AWR well shall be operated, monitored, and reported at its operating temperature with no further NSPS action.
 - (ii) If the test indicates hydrogen concentrations below 1% by volume, the permittee shall collect a gas sample for laboratory analysis within 30 days of the initial monitoring event. Any well with a temperature greater than 160° F will be shut down and treated as a potential subsurface oxidation.
 - (iii) The permittee shall report any wells operating as AWR wells or shut down due to potential subsurface oxidation in the semiannual report required by **Condition E2-1(a)** of this permit.
 - (iv) AWR wells shall be monitored monthly for carbon monoxide using a portable field analyzer and quarterly by laboratory analysis.
 - (v) AWR wells shall be monitored monthly for visible evidence of smoke and/or char.
- (c) The permittee shall report all monitoring results in the semiannual report required by **Conditions E2-1 and E2-1(C)** of this permit. A summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance. All data shall be presented in a clear, legible format that allows the Technical Secretary to evaluate compliance.
- (d) Records of all monitoring shall be maintained at the facility and made available for inspection by the Technical Secretary or his representative upon request. These records must be retained for a period of not less than five (5) years.

3. 120-Day Timeline for Correction of Exceedances (§40 CFR §60.755(a) (3) and (5))

40 CFR §§60.755(a)(3) and (a)(5) require the landfill owner or operator to remedy gas collection and control system (GCCS) operating and compliance monitoring exceedances within 5 calendar days. If the condition cannot be corrected within 15 days of the initial exceedance, the GCCS must be expanded within 120 days of the initial reported exceedance, or an alternate remedy to correct the exceedance(s) and a corresponding timeline for implementation may be submitted for agency approval. The following corrective actions may be implemented (in lieu of expansion of the GCCS) during the 120-day assessment period:

- (a) The permittee may repair or replace existing damaged components (replacement of wellheads, faulty pumps, etc.) or install new components (e.g. installation of pumps in extraction wells, sumps, etc.).
- (b) The permittee may assess whether the well has become nonproductive. If the well(s) are non-producing, the permittee may follow the actions described under item 1 of this attachment.
- (c) If exceedances cannot be corrected as specified in (a) and (b) above, the permittee shall expand the GCCS within 120 days of the initial

reported exceedance, or request an alternative timeline for mitigating the exceedance.

- (d) Records of all corrective actions shall be maintained at the facility and made available for inspection by the Technical Secretary or his representative upon request. These records must be retained for a period of not less than five (5) years.

4. **Oxygen Concentration Limit for Odor Control System:** An oxygen concentration limit of 20.9% is approved for leachate sumps, cleanout risers, and horizontal trenches that are connected to the gas collection system and used exclusively for odor control. Exceedances of the 20.9% oxygen concentration limit may be addressed using the decommissioning procedures identified in item 1 of this Attachment.
5. **Migration Control Wells:** Extraction wells installed outside of waste are exempt from the requirements of Subpart WWW.
6. **Early Installation of Gas Extraction Wells:** Extraction wells installed prior to the onset of NSPS Requirements (5 years for active areas or 2 years for areas that are closed or at final waste grade) will not be required to comply with the operational, record-keeping, or monitoring requirements of the NSPS until the wells are required for those areas.
7. **Use of Portable Monitoring Devices:** Monitoring of the parameters in 40 CFR §60.753 through 40 CFR §60.758 may be performed with a portable monitoring instrument such as a GEM 2000/500, LMS, or equivalent. The monitoring equipment will be verified to provide accurate measurement of methane, carbon dioxide, oxygen, temperature, and pressure.
8. **Positive Pressure under a Geomembrane/Synthetic Cover:** A positive pressure of 5" WC is allowed for extraction wells located in areas in which a geomembrane or synthetic cover is in use that has been installed in accordance with U. S. EPA requirements for these materials.
9. **Collection Device Abandonment:** Due to changing conditions such as damage to a well during operations or long term non-productive areas, extraction wells may need to be re-drilled, abandoned, and/or decommissioned. The permittee may proceed with such changes without prior approval from the Administrator, provided that the permittee provides written notification to the Administrator in the first Title V semiannual report following the change. The notification shall include: 1) a statement that the landfill will have sufficient well density to comply with the NSPS requirements; and 2) a certified updated GCCS Layout drawing by a professional engineer.
10. **Flow Meters When No Bypass Is Present:** §40 CFR §60.756(b)(i) and (ii) require the owner/operator of an affected source to install a flow meter to record flow to or bypass of the control device. However, the Municipal Solid Waste Landfill NSPS/EG Questions And Answers document from EPA indicates that LFG flow measurement or lock and key requirements would not apply to a GCCS that is designed with no physical means to bypass the control device. The existing GCCS design at this facility satisfies the flow measurement/lock-and-key waiver criteria, and the permittee is not required to install and operate a flow measuring device in accordance with the NSPS requirements. If the permittee decides to install a flow measuring device, the permittee is not required to monitor or record flow in accordance with NSPS. In the event that a malfunction occurs with the GCCS equipment, an electric or pneumatically operated valve has been designed to close to prevent the direct venting of raw LFG into the atmosphere.

ATTACHMENT 3

**Applicable Parts from Code of Federal Regulations,
Title 40, Part 61, Subpart M,
National Emission Standards for Asbestos**

Title 40: Protection of Environment
PART 61—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

Applicable Parts from
Subpart M—National Emission Standard for Asbestos

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§61.151 Standard for inactive waste disposal sites for asbestos mills and manufacturing and fabricating operations.

§61.154 Standard for active waste disposal sites.

Authority: 42 U.S.C. 7401, 7412, 7414, 7416, 7601.

Source: 49 FR 13661, Apr. 5, 1984, unless otherwise noted.

§61.140 Applicability.

The provisions of this subpart are applicable to those sources specified in §§61.142 through 61.151, 61.154, and 61.155.

[55 FR 48414, Nov. 20, 1990]

§61.141 Definitions.

All terms that are used in this subpart and are not defined below are given the same meaning as in the Act and in subpart A of this part.

Active waste disposal site means any disposal site other than an inactive site.

Adequately wet means sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

Asbestos means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite.

Asbestos-containing waste materials means mill tailings or any waste that contains commercial asbestos and is generated by a source subject to the provisions of this subpart. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing material waste and materials contaminated with asbestos including disposable equipment and clothing.

Asbestos mill means any facility engaged in converting, or in any intermediate step in converting, asbestos ore into commercial asbestos. Outside storage of asbestos material is not considered a part of the asbestos mill.

Asbestos tailings means any solid waste that contains asbestos and is a product of asbestos mining or milling operations.

Asbestos waste from control devices means any waste material that contains asbestos and is collected by a pollution control device.

Category I nonfriable asbestos-containing material (ACM) means asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy.

Category II nonfriable ACM means any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos as determined using the methods specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Commercial asbestos means any material containing asbestos that is extracted from ore and has value because of its asbestos content.

Cutting means to penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing, or punching.

Demolition means the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.

Emergency renovation operation means a renovation operation that was not planned but results from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden. This term includes operations necessitated by nonroutine failures of equipment.

Fabricating means any processing (e.g., cutting, sawing, drilling) of a manufactured product that contains commercial asbestos, with the exception of processing at temporary sites (field fabricating) for the construction or restoration of facilities. In the case of friction products, fabricating includes bonding, debonding, grinding, sawing, drilling, or other similar operations performed as part of fabricating.

Facility means any institutional, commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units); any ship; and any active or inactive waste disposal site. For purposes of this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building. Any structure, installation or building that was previously subject to this subpart is not excluded, regardless of its current use or function.

Facility component means any part of a facility including equipment.

Friable asbestos material means any material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

Fugitive source means any source of emissions not controlled by an air pollution control device.

Glove bag means a sealed compartment with attached inner gloves used for the handling of asbestos-containing materials. Properly installed and used, glove bags provide a small work area enclosure typically used for small-scale asbestos stripping operations. Information on glove-bag installation, equipment and supplies, and work practices is contained in the Occupational Safety and Health Administration's (OSHA's) final rule on occupational exposure to asbestos (appendix G to 29 CFR 1926.58).

Grinding means to reduce to powder or small fragments and includes mechanical chipping or drilling.

In poor condition means the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.

Inactive waste disposal site means any disposal site or portion of it where additional asbestos-containing waste material has not been deposited within the past year.

Installation means any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under common control).

Leak-tight means that solids or liquids cannot escape or spill out. It also means dust-tight.

Malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of asbestos are increased. Failures of equipment shall not be considered malfunctions if they are caused in any way by poor maintenance, careless operation, or any other preventable upset conditions, equipment breakdown, or process failure.

Manufacturing means the combining of commercial asbestos—or, in the case of woven friction products, the combining of textiles containing commercial asbestos—with any other material(s), including commercial asbestos, and the processing of this combination into a product. Chlorine production is considered a part of manufacturing.

Natural barrier means a natural object that effectively precludes or deters access. Natural barriers include physical obstacles such as cliffs, lakes or other large bodies of water, deep and wide ravines, and mountains. Remoteness by itself is not a natural barrier.

Nonfriable asbestos-containing material means any material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Nonscheduled renovation operation means a renovation operation necessitated by the routine failure of equipment, which is expected to occur within a given period based on past operating experience, but for which an exact date cannot be predicted.

Outside air means the air outside buildings and structures, including, but not limited to, the air under a bridge or in an open air ferry dock.

Owner or operator of a demolition or renovation activity means any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated or any person who owns, leases, operates, controls, or supervises the demolition or renovation operation, or both.

Particulate asbestos material means finely divided particles of asbestos or material containing asbestos.

Planned renovation operations means a renovation operation, or a number of such operations, in which some RACM will be removed or stripped within a given period of time and that can be predicted. Individual nonscheduled operations are included if a number of such operations can be predicted to occur during a given period of time based on operating experience.

Regulated asbestos-containing material (RACM) means (a) Friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

Remove means to take out RACM or facility components that contain or are covered with RACM from any facility.

Renovation means altering a facility or one or more facility components in any way, including the stripping or removal of RACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

Resilient floor covering means asbestos-containing floor tile, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing more than 1 percent asbestos as determined using polarized light microscopy according to the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy.

Roadways means surfaces on which vehicles travel. This term includes public and private highways, roads, streets, parking areas, and driveways.

Strip means to take off RACM from any part of a facility or facility components.

Structural member means any load-supporting member of a facility, such as beams and load supporting walls; or any nonload-supporting member, such as ceilings and nonload-supporting walls.

Visible emissions means any emissions, which are visually detectable without the aid of instruments, coming from RACM or asbestos-containing waste material, or from any asbestos milling, manufacturing, or fabricating operation. This does not include condensed, uncombined water vapor.

Waste generator means any owner or operator of a source covered by this subpart whose act or process produces asbestos-containing waste material.

Waste shipment record means the shipping document, required to be originated and signed by the waste generator, used to track and substantiate the disposition of asbestos-containing waste material.

Working day means Monday through Friday and includes holidays that fall on any of the days Monday through Friday.

[49 FR 13661, Apr. 5, 1984; 49 FR 25453, June 21, 1984, as amended by 55 FR 48414, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991; 60 FR 31920, June 19, 1995]

Generator	1. Work site name and mailing address		Owner's name	Owner's telephone no.
	2. Operator's name and address		Operator's telephone no.	
	3. Waste disposal site (WDS) name, mailing address, and physical site location		WDS phone no.	
	4. Name, and address of responsible agency			
Generator	5. Description of materials		6. Containers No. Type	7. Total quantity m ³ (yd ³)
	8. Special handling instructions and additional information			
	9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.			
Transporter	Printed/typed name & title		Signature	Month Day Year
	10. Transporter 1 (Acknowledgment of receipt of materials)			
	Printed/typed name & title		Signature	Month Day Year
	Address and telephone no.			
	11. Transporter 2 (Acknowledgment of receipt of materials)			
Disposal Site	Printed/typed name & title		Signature	Month Day Year
	Address and telephone no.			
	12. Discrepancy indication space			
Disposal Site	13. Waste disposal site owner or operator: Certification of receipt of asbestos materials covered by this manifest except as noted in item 12.			
	Printed/typed name & title		Signature	Month Day Year

Figure 4. Waste Shipment Record

(Continued)

INSTRUCTIONS	
Waste Generator Section (Items 1-9)	
1.	Enter the name of the facility at which asbestos waste is generated and the address where the facility is located. In the appropriate spaces, also enter the name of the owner of the facility and the owner's phone number.
2.	If a demolition or renovation, enter the name and address of the company and authorized agent responsible for performing the asbestos removal. In the appropriate spaces, also enter the phone number of the operator.
3.	Enter the name, address, and physical site location of the waste disposal site (WDS) that will be receiving the asbestos materials. In the appropriate spaces, also enter the phone number of the WDS. Enter "on-site" if the waste will be disposed of on the generator's property.
4.	Provide the name and address of the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program.
5.	Indicate the types of asbestos waste materials generated. If from a demolition or renovation, indicate the amount of asbestos that is <ul style="list-style-type: none"> - Friable asbestos material - Nonfriable asbestos material
6.	Enter the number of containers used to transport the asbestos materials listed in item 5. Also enter one of the following container codes used in transporting each type of asbestos material (specify any other type of container used if not listed below): <ul style="list-style-type: none"> DM - Metal drums, barrels DP - Plastic drums, barrels BA - 6 mil plastic bags or wrapping
7.	Enter the quantities of each type of asbestos material removed in units of cubic meters (cubic yards).
8.	Use this space to indicate special transportation, treatment, storage or disposal or Bill of Lading information. If an alternate waste disposal site is designated, note it here. Emergency response telephone numbers or similar information may be included here.
9.	The authorized agent of the waste generator must read and then sign and date this certification. The date is the date of receipt by transporter.
NOTE: The waste generator must retain a copy of this form.	

(continued)

Figure 4. Waste Shipment Record

Transporter Section (Items 10 & 11)	
10. & 11.	Enter name, address, and telephone number of each transporter used, if applicable. Print or type the full name and title of person accepting responsibility and acknowledging receipt of materials as listed on this waste shipment record for transport. Enter date of receipt and signature.
NOTE: The transporter must retain a copy of this form.	
Disposal Site Section (Items 12 & 13)	
12.	The authorized representative of the WDS must note in this space any discrepancy between waste described on this manifest and waste actually received as well as any improperly enclosed or contained waste. Any rejected materials should be listed and destination of those materials provided. A site that converts asbestos-containing waste material to nonasbestos material is considered a WDS.
13.	The signature (by hand) of the authorized WDS agent indicates acceptance and agreement with statements on this manifest except as noted in item 12. The date is the date of signature and receipt of shipment.
NOTE: The WDS must retain a completed copy of this form. The WDS must also send a completed copy to the operator listed in item 2.	

Figure 4. Waste Shipment Record

§61.151 Standard for inactive waste disposal sites for asbestos mills and manufacturing and fabricating operations.

Each owner or operator of any inactive waste disposal site that was operated by sources covered under §61.142, 61.144, or 61.147 and received deposits of asbestos-containing waste material generated by the sources, shall:

(a) Comply with one of the following:

(1) Either discharge no visible emissions to the outside air from an inactive waste disposal site subject to this paragraph; or

(2) Cover the asbestos-containing waste material with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material. In desert areas where vegetation would be difficult to maintain, at least 8 additional centimeters (3 inches) of well-graded, nonasbestos crushed rock may be placed on top of the final cover instead of vegetation and maintained to prevent emissions; or

(3) Cover the asbestos-containing waste material with at least 60 centimeters (2 feet) of compacted nonasbestos-containing material, and maintain it to prevent exposure of the asbestos-containing waste; or

(4) For inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used instead of the methods in paragraphs (a) (1), (2), and (3) of this section. Use the agent in the manner and frequency recommended for the particular asbestos tailings by the manufacturer of the dust suppression agent to achieve and maintain dust control. Obtain prior written approval of the Administrator to use other equally effective dust suppression agents. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

(b) Unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as follows, or comply with paragraph (a) (2) or (a) (3) of this section.

(1) Display warning signs at all entrances and at intervals of 100 m (328 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited. The warning signs must:

(i) Be posted in such a manner and location that a person can easily read the legend; and

(ii) Conform to the requirements for 51 cm×36 cm (20"×14") upright format signs specified in 29 CFR 1910.145(d) (4) and this paragraph; and

(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend	Notation
Asbestos Waste Disposal Site	2.5 cm (1 inch) Sans Serif, Gothic or Block
Do Not Create Dust	1.9 cm (3/4 inch) Sans Serif, Gothic or Block

Breathing Asbestos is Hazardous to Your Health	14 Point Gothic.
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Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(2) Fence the perimeter of the site in a manner adequate to deter access by the general public.

(3) When requesting a determination on whether a natural barrier adequately deters public access, supply information enabling the Administrator to determine whether a fence or a natural barrier adequately deters access by the general public.

(c) The owner or operator may use an alternative control method that has received prior approval of the Administrator rather than comply with the requirements of paragraph (a) or (b) of this section.

(d) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site under this section, and follow the procedures specified in the notification. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site and the final disposal site.

(e) Within 60 days of a site becoming inactive and after the effective date of this subpart, record, in accordance with State law, a notation on the deed to the facility property and on any other instrument that would normally be examined during a title search; this notation will in perpetuity notify any potential purchaser of the property that:

(1) The land has been used for the disposal of asbestos-containing waste material;

(2) The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in §61.154(f) have been filed with the Administrator; and

(3) The site is subject to 40 CFR part 61, subpart M.

[49 FR 13661, Apr. 5, 1984, as amended at 53 FR 36972, Sept. 23, 1988. Redesignated and amended at 55 FR 48429, Nov. 20, 1990]

§61.154 Standard for active waste disposal sites.

Each owner or operator of an active waste disposal site that receives asbestos-containing waste material from a source covered under §61.149, 61.150, or 61.155 shall meet the requirements of this section:

(a) Either there must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of paragraph (c) or (d) of this section must be met.

(b) Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as follows, or the requirements of paragraph (c) (1) of this section must be met.

(1) Warning signs must be displayed at all entrances and at intervals of 100 m (330 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited. The warning signs must:

(i) Be posted in such a manner and location that a person can easily read the legend; and

(ii) Conform to the requirements of 51 cm × 36 cm (20"×14") upright format signs specified in 29 CFR 1910.145(d) (4) and this paragraph; and

(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend	Notation
Asbestos Waste Disposal Site	2.5 cm (1 inch) Sans Serif, Gothic or Block.
Do Not Create Dust	1.9 cm (3/4 inch) Sans Serif, Gothic or Block.
Breathing Asbestos is Hazardous to Your Health	14 Point Gothic.

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(2) The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public.

(3) Upon request and supply of appropriate information, the Administrator will determine whether a fence or a natural barrier adequately deters access by the general public.

(c) Rather than meet the no visible emission requirement of paragraph (a) of this section, at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

(1) Be covered with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, or

(2) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and

frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

(d) Rather than meet the no visible emission requirement of paragraph (a) of this section, use an alternative emissions control method that has received prior written approval by the Administrator according to the procedures described in §61.149(c)(2).

(e) For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall:

(1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:

(i) The name, address, and telephone number of the waste generator.

(ii) The name, address, and telephone number of the transporter(s).

(iii) The quantity of the asbestos-containing waste material in cubic meters (cubic yards).

(iv) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.

(v) The date of the receipt.

(2) As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.

(3) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

(4) Retain a copy of all records and reports required by this paragraph for at least 2 years.

(f) Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

(g) Upon closure, comply with all the provisions of §61.151.

(h) Submit to the Administrator, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.

(i) Furnish upon request, and make available during normal business hours for inspection by the Administrator, all records required under this section.

(j) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site and the final disposal site.

(Secs. 112 and 301(a) of the Clean Air Act as amended (42 U.S.C. 7412, 7601(a))

[49 FR 13661, Apr. 5, 1990. Redesignated and amended at 55 FR 48431, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991]

ATTACHMENT 4

**Tennessee Air Pollution Control Regulations,
Applicable Parts from Rule 1200-03-11-.02
Hazardous Air Contaminants-Asbestos**

1200-03-11 HAZARDOUS AIR CONTAMINANTS (August, 2011)

APPLICABLE PARTS FROM 1200-03-11-.02 ASBESTOS

The provisions of this rule are applicable to those sources specified in 1200-03-11-.02(2)(a) through (1), 1200-03-11-.02(5) and 1200-03-11-.02(6).

1200-03-11-.02(1) Definitions.

All terms that are used in this rule and are not defined below are given the same meaning as provided in Chapter 1200-03-2 DEFINITIONS.

(a) "Active waste disposal site" means any disposal site other than an inactive site.

(b) "Adequately wet" means sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

(c) "Asbestos" means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite.

(d) "Asbestos-containing material" (ACM) means asbestos or any asbestos containing material, which contains more than 1 percent asbestos as determined using Polarized Light Microscopy according to the method specified in Appendix A, Subpart F, 40 CFR, Part 763, Section 1, Polarized Light Microscopy, as contained in the 7-1-91 Edition of the CFR.

(e) "Asbestos-containing waste materials" means mill tailings or any waste that contains commercial asbestos and is generated by a source subject to the provisions of this rule. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing material waste and materials contaminated with asbestos including disposable equipment and clothing.

(f) "Asbestos mill" means any facility engaged in converting, or in any intermediate step in converting, asbestos ore into commercial asbestos. Outside storage of asbestos material is not considered a part of the asbestos mill.

(g) "Asbestos tailings" means any solid waste that contains asbestos and is a product of asbestos mining or milling operations.

(h) "Asbestos waste from control devices" means any waste material that contains asbestos and is collected by a pollution control device.

(i) "Category I nonfriable ACM" means asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products, containing more than 1 percent asbestos as determined using polarized light microscopy according to the method specified in Appendix A, Subpart F, 40 CFR Part 763, section 1, Polarized Light Microscopy, as contained in the 7-1-91 Edition of the CFR.

(j) "Category II nonfriable ACM" means any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos, as determined using polarized light microscopy according to the methods specified in Appendix A, Subpart F, 40 CFR Part 763, section 1, Polarized Light Microscopy, as contained in the 7-1-91 Edition of the CFR, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure

(k) "Commercial asbestos" means any material containing asbestos that is extracted from ore and has value because of its asbestos content.

(l) "Cutting" means to penetrate with a sharp-edged instrument and includes sawing but does not include shearing, slicing, or punching.

(m) "Demolition" means the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.

(n) "Emergency renovation operation" means a renovation operation that was not planned but results from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden. This term includes operations necessitated by nonroutine failures of equipment.

(o) "Fabricating" means any processing (e.g., cutting, sawing, drilling) of a manufactured product that contains commercial asbestos, with the exception of processing at temporary sites (field fabricating) for the construction or restoration of facilities. In the case of friction products, fabricating includes bonding, debonding, grinding, sawing, drilling, or other similar operations performed as part of fabricating.

(p) "Facility" means any institutional, commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units); any ship; and any active or inactive waste disposal site. For purposes of this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building. Any structure, installation or building that was previously subject to this rule is not excluded, regardless of its current use or function.

(q) "Facility component" means any part of a facility including equipment.

(r) "Friable asbestos material" means any material containing more than 1 percent asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, section 1, Polarized Light Microscopy, as contained in the 7-1-91 Edition of the CFR, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

(s) "Fugitive source" means any source of emissions not controlled by an air pollution control device.

(t) "Glove bag" means a sealed compartment with attached inner gloves used for the handling of asbestos-containing materials. Properly installed and used, glove bags provide a small work area enclosure typically used for small-scale asbestos stripping operations. Information on glove-bag installation, equipment and supplies, and work practices is contained in the Occupational Safety and Health Administration's (OSHA's) final rule on occupational exposure to asbestos (Appendix G to 29 CFR 1926.58, as contained in the 7-1-91 Edition of the CFR).

(u) "Grinding" means to reduce to powder or small fragments and includes mechanical chipping or drilling.

(v) "Inactive waste disposal site" means any disposal site or portion of it where additional asbestos-containing waste material has not been deposited within the past year.

(w) "In poor condition" means the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.

(x) "Installation" means any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under common control).

(y) "Leak-tight" means that solids or liquids cannot escape or spill out. It also means dusttight.

(z) "Malfunction" means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of asbestos are increased. Failures of equipment shall not be considered malfunctions if they are caused in any way by poor maintenance, careless operation, or any other preventable upset conditions, equipment breakdown, or process failure.

(aa) "Manufacturing" means the combining of commercial asbestos--or, in the case of woven friction products, the combining of textiles containing commercial asbestos--with any other material(s), including commercial

asbestos, and the processing of this combination into a product. Chlorine production is considered a part of manufacturing.

(bb) "Natural barrier" means a natural object that effectively precludes or deters access. Natural barriers include physical obstacles such as cliffs, lakes or other large bodies of water, deep and wide ravines, and mountains. Remoteness by itself is not a natural barrier.

(cc) "Nonfriable asbestos material" means any material containing more than 1 percent asbestos by area as determined by the method specified in Appendix A, Subpart F, 40 CFR Part 763 section 1, Polarized Light Microscopy, as contained in the 7-1-91 Edition of the CFR, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

(dd) "Nonscheduled renovation operation" means a renovation operation necessitated by the routine failure of equipment, which is expected to occur within a given period based on past operating experience, but for which an exact date cannot be predicted.

(ee) "Owner or operator of a demolition or renovation activity" means any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated or any person who owns, leases, operates, controls, or supervises the demolition or renovation operation, or both.

(ff) "Outside air" means the air outside buildings and structures, including, but not limited to, the air under a bridge or in an open air ferry dock.

(gg) "Particulate asbestos material" means finely divided particles of asbestos or material containing asbestos.

(hh) "Planned renovation operations" means a renovation operation, or a number of such operations, in which some RACM will be removed or stripped within a given period of time and that can be predicted. Individual nonscheduled operations are included if a number of such operations can be predicted to occur during a given period of time based on operating experience.

(ii) "Regulated asbestos containing material (RACM)" means

1. Friable asbestos material,
2. Category I nonfriable ACM that has become friable,
3. Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or
4. Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of the demolition or renovation operations regulated by this rule.

(jj) "Remove" means to take out RACM or facility components that contain or are covered with RACM from any facility.

(kk) "Renovation" means altering a facility or one or more facility components in any way, including the stripping or removal of RACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

(ll) "Resilient floor covering" means asbestos-containing floor tile, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing more than 1 percent asbestos as determined using polarized light microscopy according to the method specified in Appendix A, Subpart F, 40 CFR Part 763, section 1, Polarized Light Microscopy, as contained in the 7-1-91 Edition of the CFR.

(mm) "Roadways" means surfaces on which vehicles travel. This term includes public and private highways, roads, streets, parking areas, and driveways.

(nn) "Strip" means to take off RACM from any part of a facility or facility components.

(oo) "Structural member" means any load supporting member of a facility, such as beams and load supporting walls; or any nonload supporting member, such as ceilings and nonload-supporting walls.

(pp) "Visible emissions" means any emissions, which are visually detectable without the aid of instruments, coming from RACM or asbestos-containing waste material, or from any asbestos milling, manufacturing, or fabricating operation. This does not include condensed, uncombined water vapor.

(qq) "Waste generator" means any owner or operator of a source covered by this rule whose act or process produces asbestos-containing waste material.

(rr) "Waste shipment record" means the shipping document, required to be originated and signed by the waste generator, used to track and substantiate the disposition of asbestos-containing waste material.

(ss) "Working day" means Monday through Friday and includes holidays that fall on any of the days Monday through Friday.

The following applies upon receipt of asbestos waste at the landfill:

1200-03-11-.02(5) Standard for active waste disposal sites.

Each owner or operator of an active waste disposal site that receives asbestos-containing waste material from a source covered under 1200-03-11-.02(2)(k), 1200-03-11-.02(2)(j), or 1200-03-11-.02(6) shall meet the requirements of this paragraph:

(a) Either there must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of subparagraph (c) or (d) of this paragraph must be met.

(b) Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as follows, or the requirements of subparagraph (c), part 1 of this paragraph must be met.

1. Warning signs must be displayed at all entrances and at intervals of 100 m (328 feet) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited. The warning signs must:

(i) Be posted in such a manner and location that a person can easily read the legend; and

(ii) Conform to the requirements for 51 cm x 36 cm (20" x 14") upright format signs specified in 29 CFR 1910.145(d) (as published in (7-1-91 Edition)) and this subparagraph; and

(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this subparagraph.

Legend	Notation
Asbestos Waste Disposal Site	2.5 cm (1 inch) Sans Serif, Gothic or Block.
Do Not Create Dust	1.9 cm (3/4 inch) Sans Serif, Gothic or Block.
Breathing Asbestos is Hazardous to Your Health	14 Point Gothic.

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

2. The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public.

3. Upon request and supply of appropriate information, the Technical Secretary will determine whether a fence or natural barrier adequately deters access by the general public.

(c) Rather than meet the no visible emission requirement of subparagraph (a) of this paragraph, at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

1. Be covered with at least 15 centimeters (6 inches) of compacted nonasbestos containing material, or

2. Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Technical Secretary. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust

(d) Rather than meet the no visible emission requirement of subparagraph (a) of this paragraph, use an alternative emissions control method that has received prior written approval by the Administrator of the EPA and the Technical Secretary according to the procedures described in 1200-03-11-.02(2)(k)3(ii).

(e) For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall:

1. Maintain waste shipment records, using the form shown in Figure 4, and include the following information:

(i) The name, address, and telephone number of the waste generator.

(ii) The name, address, and telephone number of the transporter(s).

(iii) The quantity of the asbestos-containing waste material in cubic meters (cubic yards).

(iv) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the Technical Secretary by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.

(v) The date of receipt.

2. As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.

3. Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report it in writing to the Technical Secretary. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

4. Retain a copy of all records and reports required by this subparagraph for at least 2 years.

(f) Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

(g) Upon closure, comply with all the provisions of 1200-03-11-.02(2)(1).

(h) Submit to the Technical Secretary, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.

(i) Furnish upon request, and make available during normal business hours for inspection by the Technical Secretary, all records required under this paragraph.

(j) Notify the Technical Secretary in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Technical Secretary at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

1. Scheduled starting and completion dates.

2. Reason for disturbing the waste.

3. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Technical Secretary may require changes in the emission control procedure to be used.

4. Location of any temporary storage site and the final disposal site.

Upon closure of an active waste disposal site for asbestos, the permittee shall comply with 1200-03-11-.02(2) (1). For the purposes of closure of an active waste disposal site, the following will be utilized.

The definition of closure is not contained in 40 CFR 61 Subpart M; however, the following is provided and referenced regarding the closure of a landfill. 40 CFR 60 Subpart WWW defines closure of a landfill. Using that definition, closure for an active waste disposal site for asbestos will be defined as follows:

Closed asbestos-containing waste material disposal site means an asbestos-containing waste material disposal site or portion of it in which asbestos-containing waste material is no longer being placed, and in which no additional asbestos-containing waste materials will be placed without first obtaining a permit as prescribed under 1200-03-11-.01(2)(a). Once a permit has been issued, and additional asbestos-containing waste material is placed in the asbestos-containing waste material disposal site, the asbestos-containing waste material disposal site is no longer closed.

Closure means that point in time when an asbestos-containing waste material disposal site becomes a closed asbestos-containing waste material disposal site.

1200-03-11-.02(2) (1) Standard for inactive waste disposal sites for asbestos mills and manufacturing and fabricating operations.

Each owner or operator of any inactive waste disposal site that was operated by sources covered under 1200-03-11-.02(2)(a), 1200-03-11-.02(2)(c), or 1200-03-11-.02(2)(h) and received deposits of asbestos-containing waste material generated by the sources, shall:

1. Comply with one of the following:

(i) Either discharge no visible emissions to the outside air from an inactive waste disposal site subject to this subparagraph; or

(ii) Cover the asbestos-containing waste material with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material. In desert areas where vegetation would be difficult to maintain, at least 8 additional centimeters (3 inches) of well-graded, nonasbestos crushed rock may be placed on top of the final cover instead of vegetation and maintained to prevent emissions; or

(iii) Cover the asbestos containing waste material with at least 60 centimeters (2 feet) of compacted nonasbestos-containing material, and maintain it to prevent exposure of the asbestos-containing waste; or

(iv) For inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used instead of the methods in subparts 1(i), (ii), and (iii) of this subparagraph. Use the agent in the manner and frequency recommended (for the particular asbestos tailings) by the manufacturer of the dust suppression agent to achieve and maintain dust control. Obtain prior written approval of the Technical Secretary to use other equally effective dust suppression agents. For purposes of this subparagraph, any used, spent, or other waste oil is not considered a dust suppression agent.

2. Unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as follows, or comply with subparts 1(ii) or 1 (iii) of this subparagraph.

(i) Display warning signs at all entrances and at intervals of 100 m (328 feet) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited. The warning signs must:

(I) Be posted in such a manner and location that a person can easily read the legend; and

(II) Conform to the requirements for 51 cm x 36 cm (20" x 14") upright format signs specified in 29 CFR 1910.145(d) (as published in (7-1-91 Edition)) and this subparagraph; and

(III) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this subparagraph.

Legend	Notation
Asbestos Waste Disposal Site	2.5 cm (1 inch) Sans Serif, Gothic or Block.
Do Not Create Dust	1.9 cm (3/4 inch) Sans Serif, Gothic or Block.
Breathing Asbestos is Hazardous to Your Health	14 Point Gothic.

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(ii) Fence the perimeter of the site in a manner adequate to deter access by the general public.

(iii) When requesting a determination on whether a natural barrier adequately deters public access, supply information enabling the Technical Secretary to determine whether a fence or a natural barrier adequately deters access by the general public.

3. The owner or operator may use an alternative control method that has received prior approval of the Administrator of the EPA and the Technical Secretary rather than comply with the requirements of parts 1 or 2 of this subparagraph.

4. Notify the Technical Secretary in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site under this subparagraph, and follow the procedures specified in the notification. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Technical Secretary at least 10 working days before the excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(i) Scheduled starting and completion dates.

(ii) Reason for disturbing the waste.

(iii) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Technical Secretary may require changes in the emission control procedures to be used.

(iv) Location of any temporary storage site and the final disposal site.

5. Within 60 days of a site becoming inactive and after the effective date of this rule, record, in accordance with State law, a notation on the deed to the facility property and on any other instrument that would normally be examined during a title search; this notation will in perpetuity notify any potential purchaser of the property that:

(i) The land has been used for the disposal of asbestos-containing waste material;

(ii) The survey plot and record of the location and quantity of asbestos containing waste disposed of within the disposal site required in 1200-03-11-.02(5)(f) have been filed with the Technical Secretary; and

(iii) The site is subject to 40 CFR 61 Subpart M, as contained in the 7-1-91 Edition of the CFR.

Permit Number 569924

Expiration Date: Five years minus one day from issuance

Permit Number 569924

Expiration Date: Five years minus one day from issuance

Figure 4

Permit Number 569924

Expiration Date: Five years minus one day from issuance



State of Tennessee
Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243-1531
615-532-0554

Asbestos Waste Shipment Record

(See Completion Instructions on Reverse)

GENERATOR	1. Work site name and mailing address		Owner's name	Owner's telephone no.
	2. Operator's name and address			Operator's telephone no.
	Authorized agent: _____			
	3. Waste disposal site (WDS) name, mailing address, physical site location:		WDS phone no.	
			Permit No.	
	4. Name and address of responsible agency: Tennessee Department of Environment & Conservation Division of Air Pollution Control William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 15 th Floor Nashville, TN 37243-1531			
TRANSPORTER	5. Description of waste:		6. Containers No. _____ Type _____ (See instructions for type code)	7. Total quantity _____ yd ³ _____ gal
	8. Special handling instructions and additional information:			
	9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.			
	Printed/typed name _____ Title _____ Date _____			
DISPOSAL SITE	10. Transporter # 1 (Acknowledgement of receipt of waste) Printed/typed name _____ Title _____ Date _____ Signature _____ Phone (____) _____ Address _____			
	11. Transporter # 2 (Acknowledgement of receipt of waste) Printed/typed name _____ Title _____ Date _____ Signature _____ Phone (____) _____ Address _____			
	12. Discrepancy indication space:			
	13. Waste disposal site owner or operator: Certification of receipt of asbestos materials covered by this manifest except as noted in item 12. Printed/typed name _____ Title _____ Date _____ Signature _____ Phone (____) _____			

Instructions for Completing Tennessee Asbestos Waste Shipment Record (Form CN-1054)**Waste Generator Section (Items 1-9)** NOTE: The waste generator must retain a copy of this form.

1. Enter the name and address of the facility at which asbestos waste is generated. In the appropriate spaces, also enter the name of the owner of the facility and the owner's phone number.
2. If a demolition or renovation, enter the name and address of the company and the **authorized agent** responsible for performing the asbestos removal. In the appropriate space, also enter the phone number of the operator.
3. Enter the name, address, and physical site location of the waste disposal site (WDS) that will be receiving the materials. In the appropriate spaces, also enter the phone number and permit number of the WDS. Enter "on-site" if the waste will be disposed of on the generator's property.
4. Provide the name and address of the local, state, or EPA regional office responsible for administering the asbestos NESHAP program.
5. Indicate the types of asbestos waste materials generated. If from a demolition or renovation, indicate the amount of asbestos that is
 - Friable asbestos material
 - Non-friable asbestos material
6. Enter the number of containers used to transport the asbestos materials listed in item 5. Also enter one of the following container codes used in transporting each type of asbestos material (specify any other type of container used if not listed below):
 - DM** - Metal drums, barrels
 - DP** - Plastic drums, barrels
 - BA** - Plastic bags or wrapping
7. Enter the quantity of each type of asbestos material removed in units of cubic yards (or gallons if drums or barrels are used).
8. Use this space to indicate special transportation, treatment, storage or disposal or Bill of Lading information. If an alternate waste disposal site is designated, note it here. Emergency response telephone numbers or similar information may be included here.
9. The **authorized agent** of the waste generator must read and then sign and date this certification. The date is the date of receipt by transporter.

Transporter Section (Items 10 & 11) NOTE: The transporter must retain a copy of this form.

10. Enter the name, address, and telephone number of transporter used. Print or type the full name and title of person accepting responsibility and acknowledging receipt of materials as listed on this waste shipment record for transport. Enter date of receipt and signature.
11. Enter same information as item 10 requires if more than one transporter is used.

Disposal Site Section (Items 12 & 13)

12. The authorized representative of the WDS must note in this space any discrepancy between waste described on this manifest and waste actually received as well as any improperly enclosed or contained waste. Any rejected materials should be listed and destination of those materials provided. A site that converts asbestos-containing waste material to non-asbestos material is considered a WDS.
13. The signature (by hand) of the authorized WDS agent indicates acceptance and agreement with statements on this manifest except as noted in item 12. The date is the date of signature and receipt of shipment.

NOTE: The WDS must retain a completed copy of this form for at least 2 years. The WDS must also send a completed copy to the operator listed in item 2.

Permit Number 569924

Expiration Date: Five years minus one day from issuance

Authority: T.C.A. §§4-5-202 et. seq. and 68-201-105. **Administrative History:** Original rule filed January 10, 1977; effective February 9, 1977. Amendment filed April 17, 1978; effective June 16, 1978. Amendment filed August 21, 1981; effective October 5, 1981. Amendment filed March 5, 1993; effective April 19, 1993. Amendment filed March 10, 1995; effective May 24, 1995. Amendment filed January 31, 1997; effective April 16, 1997. Amendment filed December 22, 1997; March 7, 1998.